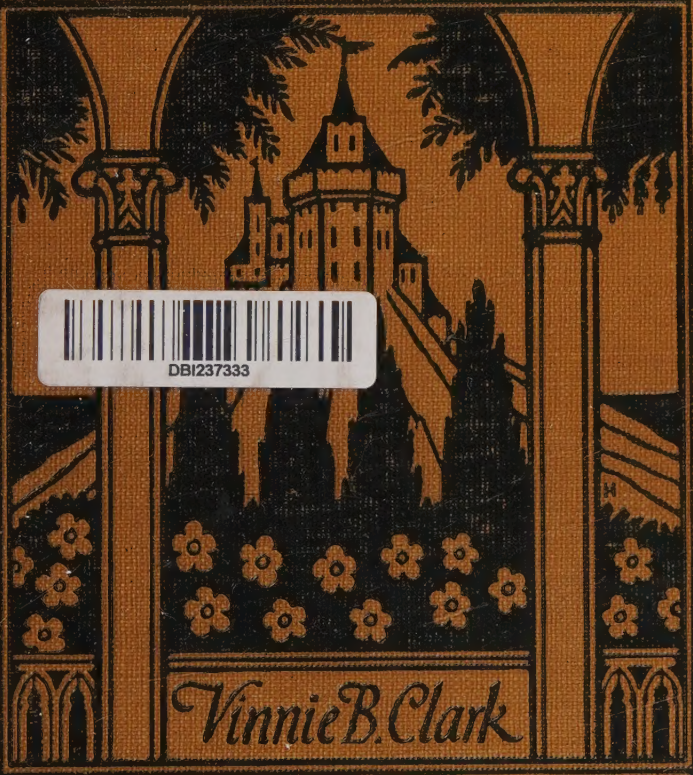
EUROPE

A Geographical Reader



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Bob Wesloh

May 1971

Germany at war with Great Britain Sept 1939. U.S. declared war with Germany Dec. 8, 1941 - Pearl Harbour attacked Dec. 7, 1941 by Japanese. -

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June 1927

EUROPE

A GEOGRAPHICAL READER

BY

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PREFACE

In this book an attempt has been made to furnish geographical material for children which will be sufficiently simple, colorful, and realistic to attract and hold their attention. At the same time an earnest attempt has been made to open up many channels of thought which the teacher can develop by means of additional and flexible assignments and class discussions.

It has been recognized throughout the book that its main purpose is not, primarily, to teach geographical principles, but to furnish an abundance of concrete, descriptive geographical material from which children under the guidance of their teacher can deduce such principles.

In this book, the educational value of the correlation of studies has been kept faithfully in mind. While it is taken for granted that each of the school subjects, geography, history, English, industrial arts, fine arts, music, etc., must have a time for the teaching and learning of its basic principles, it is also assumed that no real education of children is accomplished so long as each subject is pigeonholed by itself. It is therefore hoped and expected that teachers will correlate the geography of a country with its history, literature, art, folk songs, and folk dances. In order to adapt this book to such correlation, the countries have been grouped, as far as possible, according to language and race, not forgetting, however, geographical relationships.

In addition to this treatment of the countries of Europe as nearly as possible in racial groups, the text shows the difference between the West and the East, and the influence of the Orient upon the West. The industrialism of the West has been contrasted with the agriculture of the East and their economic interdependence emphasized.

An attempt has been made to associate with each country its own particular identity as an international unit; to show that the problems of the people of a small country have as much right to be known, understood, and appreciated as those of a large country; and that a small country sometimes achieves happiness for its people well worth emulation.

The style of writing the different chapters has been varied. When it is the desire to build up a picture of a certain region, the travelogue style has been used; where it is the intention to show a certain development along geographical lines, the subject matter is arranged appropriately for such a purpose. Much of the material is fresh and the subject matter as a whole is so planned that the child will find in each chapter "something new."

In the treatment of certain countries a special feature has been emphasized as being socially valuable to children. These features have been used to broaden the child's general education as well as his geographical horizon, as for instance in Denmark, the coöperative societies; in Sweden, the floating associations; in Belgium, its great industrial development; in the Iberian Peninsula, the effect of the blending of different races upon the people of today; in Germany, the dual success in manufacturing and agriculture; and in Russia, the influence of the endless plain.

Special industries, such as the plum industry of Jugoslavia and the perfume industry of France and Bulgaria, which are peculiarly interesting to children, are treated at considerable length although they are not of great economic importance.

Lack of space has made it impossible to do full justice to the historical setting. However, there are many historical references which will be guide posts to the teacher. Present routes of travel are pointed out as being important routes in ancient and medieval times; some of the present harbors as having functioned for centuries; present resources as having determined home industries for many hundreds of years; mountain barriers as being the homes of isolated racial groups for many generations; natural resources as having furnished articles of trade since the earliest days of commerce.

The book contains many pictures. Some of them illustrate, and others supplement, the text. Most of the pictures emphasize the activities of the people in everyday life. In general, explanatory captions of considerable length have been used in order that the children may get the most benefit from the pictures. Frequently children cannot get the full benefit of details in the pictures without explanations by the teacher. Although maps illustrating the text have been included in the book, it is intended that they shall be supplemented by the use of wall maps and atlases.

A supplementary reading list has been placed in the appendix. Some of the books and articles listed are purely geographical; others will be found of value because they contain not only geography but also the atmosphere of a particular country. The list has been made long in order to meet different library and school conditions. In the past, stories with geographical atmosphere have received too little attention. A table showing the area and population of the countries of Europe is also included in order that the children may compare the country being studied with their own state or country.

The author wishes to thank the following individuals and organizations for valuable assistance in the form of suggestions, criticisms, and other helps which have been given her: the legations at Washington, D. C., of Belgium, Bulgaria, Czechoslovakia, Denmark, Finland, Holland, Italy, Latvia, Rumania, Sweden, Switzerland, Spain, and Jugoslavia; the consuls at New York City of Albania, Esthonia, Finland, and Hungary; the American-Scandinavian Foundation at New York and Stockholm; the Geology Departments of Denmark, Finland, and Germany; the Departments of Waterways of France and Germany; the United States Bureau of Commerce; the Department of Public Education of Poland; the Official Norwegian Press Representative at New York City; Miss Katherine Amend of the Friends' Relief Mission; Dr. K. Tsenoff, of Steelton, Pa.; Miss Susan Lough of the University of Richmond, Va.; Prof. J. E. Rosberg of the University of Helsingfors; and Dr. Juan Dantin Cereceda of Madrid.

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NEW EUROPE
Scale of Miles
0 100 200 300 400 500
ATLANTIC OCEAN
ARCTIC OCEAN
MEDITERRANEAN SEA
BLACK SEA
CASPIAN SEA
AFRICA
ASIA
Reykjavik
ICELAND
Hammerfest
Tromsö
Murmansk
Archangel
LOFOTEN IS.
ARCTIC CIRCLE
Trondhjem
Vasa
Helsingfors
Leningrad
Vologda
Vyatka
Perm
Ekaterinburg
Chelyabinsk
Ufa
Nijni Novgorod
Kazan
Samara
Orenburg
Moscow
Simbirsk
Tambov
Saratov
Tsaritsyn
Astrakhan
Voronezh
Kharkov
Kursk
Orel
Tula
Gomel
Minsk
Vitebsk
Dvinsk
Riga
Libau
Memel
Kovno
Vilna
Warsaw
Berlin
Breslau
Dresden
Frankfurt
Hamburg
Copenhagen
Malmö
Oslo
Gothenburg
Stockholm
Aland
Reval
Pskov
Lake Ladoga
Lake Onega
White Sea
Kola Pen.
Petsamo
Narvik
Bergen
Stavanger
Aberdeen
Edinburgh
Glasgow
Belfast
Dublin
London
Manchester
Liverpool
Birmingham
Cardiff
Plymouth
Southampton
Portsmouth
Dover
Calais
Boulogne
Le Havre
Cherbourg
Paris
Strasbourg
Nancy
Metz
Verdun
Lille
Amiens
Rouen
Caen
Brest
Nantes
La Rochelle
Bordeaux
Lyons
Marseilles
Nice
Toulon
Corsica
Sardinia
Balearic Is.
Madrid
Valencia
Barcelona
Cordoba
Gibraltar
Lisbon
Oporto
Bilbao
Biarritz
Pyrenees
Alps
Milan
Venice
Genoa
Turin
Rome
Naples
Sicily
Messina
Tunis
Algiers
Malta
Switzerland
Berne
Zurich
Basel
The Hague
Amsterdam
Utrecht
Rotterdam
Ostend
Brussels
Antwerp
Ghent
Bruges
Luxemburg
Munich
Vienna
Prague
Krakow
Lemberg
Kiev
Budapest
Kishinef
Nikolaev
Odessa
Sea of Azov
Rostov
Ekaterinodar
Caucasus Mountains
Georgia
Tiflis
Baku
Erivan
Tabriz
Persia
Trebizond
Constantinople
Smyrna
Adana
Aleppo
Syria
Mesopotamia
Bagdad
Euphrates R.
Rhodes
Crete
Cyprus
Sea of Marmora
Dardanelles
Aegean Sea
Black Sea
Caspian Sea
Volga R.
Ural R.
Ob R.
Yenisei R.
Lena R.
Ural Mts.
Caucasus Mts.
Hungary
Rumania
Yugoslavia
Bulgaria
Greece
Albania
Serbia
Belgrade
Bucharest
Sofia
Nish
Fiume
Trieste
Zara
Salonika
Smyrna
Asia Minor
Turkey
Persia
Mesopotamia
Syria
Arabia
Egypt
Libya
Tripoli
Algeria
Tunis
Sicily
Sardinia
Corsica
Balearic Is.
Gibraltar
Malta
Cyprus
Rhodes
Crete
Lofoten Is.
Orkney Is.
Shetland Is.
Hebrides
Faroe Is.
Iceland
Greenland
Baltic Sea
North Sea
English Channel
Bay of Biscay
Gulf of Genoa
Gulf of Gibraltar
Gulf of St. Vincent
Gulf of Lyons
Gulf of Finland
Gulf of Bothnia
Gulf of Riga
Gulf of Archangel
Gulf of Onega
Gulf of Kara
Gulf of Ob
Gulf of Yenisei
Gulf of Lena
Gulf of Ural
Gulf of Caucasus
Gulf of Volga
Gulf of Ural
Gulf of Caucasus
Gulf of Volga
Gulf of Ural
Gulf of Caucasus
Gulf of Volga

Denmark occupied by Nazi's troops April 1940

Chapter I

SCANDINAVIAN COUNTRIES

DENMARK

You have often heard of "Brave Little Holland" and her fight to reclaim land from the sea. We can also justly speak of "Brave Little Denmark," for she, too, has had a fight to reclaim part of her land, although in a different way. Many of her struggles have been successful, and today, in spite of the difficulties she has had to meet, Denmark is a prosperous little country.

If you could loiter for many days around the harbors of Denmark you would see signs of Denmark's prosperity. There you would notice the longshoremen loading thousands of boxes, crates, and cases on to the ships. Most of the packages contain foods which are being sent to other countries, for Denmark produces much more of some foods than she uses. The main foods which she exports are butter, bacon, lard, and eggs. Suppose that all the pigs represented by the pork products which are annually sent from Denmark to London were put in a line. Allowing four feet to each pig, the line would extend from Copenhagen, around the peninsula of Jutland, across the North Sea to London and back again to Copenhagen. If all the eggs sent to London annually from Denmark were put end to end in a similar line, the line would reach to London and back again eight times. And if all the butter sent were put in pound packages similar to those made in the United States, and laid end to end, the line would extend to London

and back again more than nine times. It is easy to believe the fact that Denmark exports more butter and eggs than any other country in the world. With its butter, cheese, and bacon each weighed in tons, and its eggs counted in millions of dozens, is it any wonder that Denmark comes next to the United States in the exportation of animal food products? But Denmark is a very small country. It is a little more than one-third the size of New York State or about one-third as large as England. How does the size of Denmark compare with the size of your own state? By comparing the population of Denmark and England, you can find one reason why Denmark, though much smaller, has a surplus of foodstuffs to ship to England. As you read the remainder of this chapter, see if you can find other reasons.

A trip through the country districts of Denmark shows us that most of the farms producing these foodstuffs are small. How large are the farms in your community? More than a fourth of all the Danish farms are less than one and a half acres in size. Do you wonder that the foreign traveler calls these small holdings "handkerchief" farms? Another fourth of the farms contain from one and a half to thirteen and a half acres. Many others have less than forty acres. Most of the Danish farms are owned by the farmers who live on them. Although it is difficult to make a living from the very small farms, many men prefer to work on such farms of their own rather than as hired laborers on the few large estates. When a laborer wishes to buy land, the government lends him nine-tenths of the money necessary for making the purchase. Many owners of large estates have been led to sell some of their land, partly because of the difficulty of finding workers. So during two generations most of the Danish estates have been divided into small farms. In many countries of Europe much land is still in large estates. In most cases,

Courtesy Danish Legation

FIG. 1. Denmark. Scene on a medium-sized farm. Coöperation and rural education have made Denmark a prosperous agricultural country. What in the picture suggests prosperity?

land in small farms is made to yield more per acre than that in large estates.

We see as we visit Danish farms some of the ways in which the people secure big yields from their small pieces of land. We notice that there are few fences, for no space must be wasted. Cattle and sheep are "staked out" when grazing, so that they will not wander upon the land of neighbors. There are bee hives in many of the tiny flower gardens and the bees furnish honey for family use. There are dwarf apple trees and long trunk cherry trees near the farmhouses. These supply fruit for the family and at the same time do not injure by their shade the crops growing underneath. But the greatest aid in securing large crops from the farms is the care which is given to each square foot. By intensive farming each foot is made to yield as much as possible of each crop and sometimes to produce more than one crop in the summer season. Why does a farmer take more interest in the land which he, himself, owns than in that which he rents?

The soil is made to produce as much as possible and so are the cows. The record of each well-kept cow is posted over its stall. There the owner records the amount of food which it eats, the amount of milk which it gives, and the percentage of butterfat in its milk. If the record shows that the cow is "eating its head off," it is soon fattened for the meat market and a better cow is put in its stall. By this careful weeding out of poor cows the average yield of milk per cow in Denmark has been very much increased.

All other branches of farm work are as carefully watched. Chicken and hog raising, bee culture, the growing of root-crops for feeding the cows, and of sugar beets, all are carried on with scientific care. The Danish farmer has learned that he can keep a herd of twenty-five dairy cows on thirty acres of land. He knows that it is more

profitable, in general, for him to use land to grow root-crops for dairy animals than to use it to pasture them.

In learning how to use their lands well, the Danish people have been greatly aided by the work of various societies and by the government. In 1866 a few patriotic men in Denmark realized that their country had many difficulties to overcome if they were to become a prosperous nation. Along the North Sea coast a strip two or three miles wide was a sandy waste. Other great tracts, once covered with valuable forests, bore only heather. Some of the upland tracts were too dry for cultivation; other tracts were marshy. The peat bogs, which might have supplied fuel, were not used. Much of the soil, especially in the peninsula of Jutland, was very poor. Besides, another difficulty faced the country. The Danes had been raising and exporting wheat, but when the New World began to produce large quantities for export, the Danes could not find a market for their wheat. In order to help overcome such difficulties as these, the Danish Heather Society was formed.

With the help of the government, this society began its work of reforesting parts of the land, holding the sand dunes in place, draining marsh land, developing peat bogs, irrigating upland moors, and providing good fertilizer for the poor soil.

Reforesting the land was a very difficult task. The Danish Heather Society wished to grow red spruce, and thousands of these trees were set out. For a few years they seemed to grow well, and then they stopped growing and became dwarfed and gnarled. The men in charge wondered how they could make them grow into large and beautiful trees. They read books on the growing of trees, experimented in different ways, and finally found that if they planted mountain fir trees between the spruce trees the spruces would keep on growing after the firs were cut

down. This is easily explained. The firs take nitrogen out of the air. Have you ever examined the roots of alfalfa or beans and found nodules on the roots? These nodules of bacteria can take nitrogen from the air where it is plentiful and put it into the soil where it is needed. The fir trees also take nitrogen from the air but not in exactly the same way as the beans and alfalfa take it. Instead of bacteria there are fungi which grow on and in the roots of firs. These fungi take nitrogen from the air and leave it in the soil. After the firs had been planted between the spruces, it was found that the roots of the spruces were also covered with fungi. After that the fir trees could be cut down and the spruces continued to grow. In this way the members of the Heather Society set out many acres of spruce trees and reforested large tracts of land.

There are many sand dunes along the west coast of Denmark. As the west winds blow over the dunes they pick up and carry a large amount of sand eastward. In this way the strip of sandy waste had become two or three miles wide all along the west coast. In order to check the eastward journey of the sand, the society planted trees and shrubs. Those serve as windbreaks and their roots catch and hold much of the sand, which is thus kept from blowing onto the farm lands to the east.

Another section of the Danish Heather Society gives attention to draining marsh lands. The highest point in Denmark is only about 550 feet above sea level and consequently the currents of the rivers are slow and there are many marshes. The society straightens the courses of rivers and deepens their beds. In this and other ways much marsh land has been drained, and when drained it becomes excellent farm land. In the first thirty years of its work, the Danish Heather Society reclaimed almost half of the marsh land of Denmark.

Courtesy Danish Legation

FIG. 2. Denmark. A scene on the northwest coast of Jutland. Many ships have been wrecked on this sandy, shallow coast and many lives saved by the hardy Danish fishermen. Why were the rows of bushes planted in the sand?

The Danish Society also builds retaining locks in the courses of rivers. These locks hold back the flood waters which are then used during the drier season. In other places the society builds dikes which protect farm lands from floods. It also constructs dikes to reclaim tidal land.

Courtesy Danish Legation

FIG. 3. Denmark. A scene in southern Denmark. Many windmills are used to pump the water to the higher land. Under what conditions are windmills suited to a country?

Pumps are used to remove water from the bogs. Some of the water which is pumped from the bogs is used to irrigate higher, drier land. Waterwheels, windmills, and in places even steam or gasoline engines are used to raise the water to the higher lands.

One of the most important pieces of work that the Danish Heather Society has undertaken is that of making poor soil into good soil. This is done in part by mixing

fertilizer with the soil. If you were traveling through Denmark you might meet a small group of men who seem to be searching for something. They have a long, slender auger with which they bore into the ground. They pull it out carefully and pour a few drops of an acid on the core of soft rock or soil which the auger brings out. If the acid "bubbles," they know they have located another marl bed. Marl is rich in clay and lime, and is a good fertilizer for soils lacking in lime. The Danes have already located 1700 marl beds within their small country. Why do they try to find marl beds in all parts of the country, instead of shipping the marl from a few beds? Some of the farm lands require fertilizers that are not found in Denmark, and these the Danes import from other countries. They buy potash from the large German mines and phosphate from Florida. Then, too, all the barnyard fertilizer is used most carefully. Little by little through many years the soil is being built up with the aid of science. Every good farmer in Denmark takes pride in handing down his farm to his children with better soil than it had when he obtained it. These are some of the valuable things that the Danish Heather Society is doing for its little country.

In all of the work of the Danish Heather Society many of the people coöperated. But there are other reasons why Denmark is well called a "Coöperative Country." She has many coöperative societies and these have helped in her prosperity. When the Danes found that they could not make money raising wheat and other cereals, they turned to more intensive farming. Many farmers began to raise dairy cows. In those days there were two kinds of butter made in Denmark. There was the "gentleman's butter," made on the large estates of the wealthy. Then there was the "peasant's butter," which was made in small amounts in the peasants' kitchens. The "gentle-

man's butter" was well made and found a ready market in other countries. The "peasant's butter" seemed never twice the same, and brought only half the price of the other. What could the peasants do in order to get more money for their butter?

They joined together and formed Coöperative Dairy Associations. They borrowed money to build and equip

Courtesy Danish Legation

FIG. 4. Denmark. A coöperative creamery. Denmark, although only twice the size of Massachusetts, is the largest butter exporting country in the world and the second largest exporter of meat products. How does this creamery compare with those with which you are familiar?

modern creameries. Each member had to take his share of responsibility for the debt of his association. Each member pledged himself to deliver to his own coöperative dairy all the milk that his family did not use. There an expert made and marketed the butter. Each farmer was paid for the amount of milk that he delivered. At the end of the year he also received his share of the profits of the association in proportion to the amount of milk

that he had delivered. One coöperative dairy after another was established until now three-fourths of all the milk produced in Denmark is handled by the coöperative dairies. Now the "peasant's butter" is uniformly good, and brings the highest price in London, the most important market.

As the number of dairy cows increased, the farmers had to find a use for the skim milk. For that reason, they began to raise hogs in large numbers and the bacon industry developed. Bacon, as well as butter, is in great demand in London and other parts of England. New coöperative societies were formed, the Coöperative Slaughter and Bacon Societies. Many of the farmers raising hogs joined these societies, and each of them pledged himself to deliver to his own coöperative society all the hogs he sold. As in the case of the creameries, experts were put in charge and the meat was handled by the best modern methods. The coöperative society pays each farmer for his hogs when they are delivered, and at the end of the year each farmer receives his share of the profits. Today about seventy per cent of all the hogs in Denmark are owned by the members of the coöperative societies. There is also the Danish Bacon Society of London which sells the bacon in that market. Each hog raiser thus becomes not only a producer, but he is also a manufacturer and his own middleman.

If all of Denmark's annual supply of eggs were laid end to end they would reach around the earth at the equator more than three times. These, too, are handled by cooperative societies. Each egg is stamped with the date on which it is laid, the number of the farmer who sells it, and the number of the coöperative society to which the farmer belongs All the eggs for export are handled by the Danish Coöperative Egg Exporting Society. If a poor egg is shipped, the farmer who furnished it is heavily

fined. This guarantees all Danish eggs. How would this affect the price of Danish eggs in foreign markets? Eggs which are not so carefully standardized are bought in the Baltic countries by the Danes for their own use, in order that they may export more of their own eggs. Why do they do that?

You have read of several coöperative societies but there are many others. Some of them search foreign markets for the best food for the cattle, which are stall-fed at least nine months in the year. Others buy agricultural machinery, household supplies, or fertilizers. There are coöperative banks, and both houses and live stock may be insured in coöperative societies. In Copenhagen there is the Coöperative Wholesale Society of Denmark, which has different factories for making chocolate, confectionery, margarine, soap, hosiery, bicycles, and many other articles for the coöperative stores scattered throughout Denmark. Sometimes one farmer belongs to ten or even more coöperative societies. Without coöperation, the Danish farmer would not have prospered as he has. Imagine yourself a Danish farmer and plan what coöperative societies you would like to join.

The Danish government, also, helps the farmers. It aids in the inspection of foodstuffs, and thus helps to maintain a high standard; it furnishes many agricultural experts to help the farmers; it helps the work of the Danish Heather Society; and it supports excellent schools of agriculture. There are the Peoples' High Schools, Agricultural Schools, a College of Agriculture at Copenhagen, schools for small farmers and laborers, and schools of domestic science for the young women.

Of all these, the Peoples' High Schools have been most important in the lives of the Danish farmers. All children must attend school from seven to fourteen years of age, but when fourteen most of the children from the farms

Courtesy Danish Legation

FIG. 5. Denmark. The more rolling land of the country. These hills are made of material deposited by glaciers. What do you think is raised on this land? What takes the place of fences?

remain at home. They help their parents and learn to do the different kinds of farm work. At eighteen years of age they may attend the Peoples' High Schools. Each winter, courses are given for the young men. In the summer time, when the young men are doing out-of-door work on the farms, courses are given for the young women. In these High Schools, the young men and women study history, geography, literature, and other cultural subjects and sometimes have a few lectures on farming. Most of all, they are taught that farming "is a fine art"; they learn to love the land; they learn that scientific farming is the most successful farming.

Explain, now, the ways in which the Danish farmer is aided in his struggle. Can you tell why the government is willing to help in many of these ways?

Copenhagen is the capital and largest city in this interesting country. Copenhagen means "merchants' harbor." Although Copenhagen is the chief port of Denmark, it is not on the mainland. The greater part of the city is situated on low-lying land near the eastern coast of the large island of Zeeland. The smaller, eastern part of the city is on a little island off the Zeeland coast. The narrow strait which separates the small island from the large one affords the excellent natural harbor from which the city was named. For centuries, this harbor has been used by merchant ships from near and far.

Although Copenhagen is built on islands, it can be reached by train from the continent. Most of the ferries which carry passenger and freight cars across the straits are as fast and steady as sea boats. On some of them there are two sets of tracks, and these boats are so large that they can carry sixteen ten-ton cars.

There are two all-water routes by which Copenhagen can be reached from the North Sea. The southern one passes through the Kiel Canal; the northern one, through

the waters which separate Denmark from Sweden and Norway. The narrowest part of this northern route between the North Sea and the Baltic Sea is about thirty miles north of Copenhagen and is only three miles wide. At Copenhagen, this narrow strip of water, called the Sound, is a little more than four times as wide as it is at the narrows. Ships that go through the Sound to and from the Baltic countries pass near Copenhagen.

Approaching the city from the North Sea by the northern route, one meets ships from many countries. One sees here and there along the Zeeland coast, if the weather permits, forests of beech trees, attractive homes, and little fishing villages. Copenhagen seems, as one draws near it, to be a "city of spires," and such it is sometimes called. The stately grace of the spired city and its important position near the gateway to the Baltic Sea have helped to earn for it still another title, "The Queen of the Baltic."

Sailing toward Copenhagen from the north, a ship comes to the entrance to the "free port" before it reaches the old harbor. A turn to the west carries it into the "free port." Since a portion of its harbor is a free port, Copenhagen is really a port of all nations. As the name indicates, traders may land goods in the free port and transship them to other countries without the payment of duty.

The free port seems like a complete town in itself. There are long quays along the water's edge; there is an electric plant which generates the electricity used at the free port; there are many electrical cranes and a few steam cranes for handling the freight; there are two large grain warehouses into which the grain is pumped from the ships; there are other warehouses for storing other goods; there are offices for merchants, a post office, telegraph station, restaurants, and trading booths. Railways connect the quays and

warehouses with the state railroads and also with the ferries which run to and from Sweden. There is every convenience for making the free port a center for receiving, storing, and distributing goods. It is one of the busiest parts of all Copenhagen.

There are also foreign factories within the free port. Raw materials for the factories are brought from many different countries. After being manufactured in the free port, the finished articles are shipped to different markets. The manufacturers in this way avoid paying a duty on the raw materials which they use.

A large iron fence separates the free port from the city, for no goods may enter Denmark without paying the usual Danish duty. If the goods are intended for the city, they go through the Customs House. There the importer pays the duty and may then take his goods into the city.

The northern entrance to the strait which forms the older harbor is just east of the free port. Sailing southward into the strait, one passes fortresses which guard the entrance. Perhaps one will see Danish war vessels in the section of the harbor reserved for them. Along the wharves are boats of many kinds. Quaint old gabled houses here and there line the broad quays. Many people are engaged in handling the business of the harbor.

About a sixth of all the people of Denmark live in Copenhagen. Most of them live west of the strait. One may go along a canal, which is a western arm of the harbor, to the King's Market Place in the very heart of the business district. On both sides of this canal there are cobblestone pavements and bordering them one may find interesting little shops. In some of them all sorts of ships' wares are sold.

At New King's Market Place several important streets of the city meet. Street cars, automobiles, motor busses,

Courtesy Danish Legation

FIG. 6. Denmark A vegetable market in Copenhagen where hundreds of farmers gather in the early morning to sell their products.

and many bicycles help to give it an air of business. Some of the streets are so busy that bicyclers are not permitted on them from ten in the morning until ten in the evening. Many of the buildings are modern, although not very tall. Old Copenhagen was built mostly of wood, and fires have destroyed practically all its buildings of the Middle Ages. Now many of the newer buildings are built of stone or light-colored brick.

The new parts of Copenhagen have streets which are wide and well paved. In the older parts many of the streets are narrow and crooked and the buildings quaint and picturesque. There are many apartment buildings, for most of the people of Copenhagen live in apartments instead of in private houses.

In the public markets, the city people buy directly from the producers. Wagons in which produce is hauled from the farms almost fill the market places. Some of them are fitted with tanks for milk, and with shelves and closets for holding various farm products. Each wagon becomes for the time being a little shop. Many of the vegetables and flowers in the market are raised on the little island east of the harbor. In the fish market along the side of one of the canal streets, live fish may be bought. Women fishmongers, too, trundle tank carts through the streets and deliver fish alive at the kitchen doors.

Its parks, cafés, and places of amusement help to give Copenhagen an air of gaiety. Its churches, museums, music halls, university, and other public buildings give it an air of culture.

Although there are important manufactures in Copenhagen, the city is noted chiefly for its commerce. Through its harbor passes a large part of the exports and imports of Denmark. Its banks finance much of the trade of the country. Copenhagen is today, as in times past, the city of the merchants' harbor.

Every year thousands of tourists visit the beautiful northern country of Norway. Many of these tourists reach Norway on the great ocean liners which dock at the port of Bergen. Would you like to join these tourists in their trip through Norway?

Long before reaching the harbor of Bergen you are in the midst of beautiful scenery. You pass many tree-covered islands and several bold promontories. The ship carefully follows the safe channel between the islands for some miles, for Bergen is twenty-five miles from the open sea. Just before you reach the harbor of Bergen, the pilot meets the ship to guide it through the dangerous entrance. But once the ship gets inside the large harbor, it docks easily.

The harbor of Bergen is full of interesting sights. In the latter part of March you might see, at one time, several hundred fishing vessels lying in the harbor. These boats have just returned from the winter fishing season. The fishermen are busy unloading their large catch of cod and other fish. Drivers of large drays and trucks are busily loading their vehicles with fish and noisily rattling away to deliver the loads to the owners at the wholesale houses and factories. You see many large merchant ships being loaded with timber. They are flying the Norwegian flag and will soon start out for foreign countries. Other merchant ships of Norway are being loaded with boxes of salt cod, barrels of herring, cases of cod liver oil, bales of hides, and many wooden articles. At another dock, a freighter is unloading a cargo of cereals and there is another boat bringing in coal. In all this bustle at the dock, you see hundreds of longshoremen who make their living by unloading merchant boats which enter the harbor and by reloading them with a cargo for the outbound trip. But

there are many other ships besides the merchant ships. Numerous ocean liners also enter, carrying large numbers of passengers as well as some freight. And what are those smaller boats? They are the busy coasting boats which ply back and forth between the ports of Norway, for much of the traveling of this country is done by water.

Courtesy Norwegian Foreign Office

FIG. 7. Norway. A heavy catch of herring for the canning factories at Haugesund. The spring herring are large and only four or five are packed in a pound box. There are about 200 canneries in Norway and their main product is fish. The main canning section of Norway extends from Bergen south to Stavanger. What does Norway do with her fish products?

Many of the people in Bergen make their living on the sea. Many from other parts of Norway make theirs in the same way. Some are fishermen on the fishing fleet; some are sailors on the coasting vessels; some help to run the ocean liners; and some operate the merchant ships.

The merchant marine of Norway visits many ports of

the world. It is larger in proportion to the population than that of any other country. Great Britain has the largest merchant fleet and her average is about one ton of shipping to each two people. The United States has the second largest fleet but the average is only one ton for each six people. Norway's average is approximately one ton per person. There are only five countries in Europe, and only seven nations in all the world, which have a larger tonnage than Norway.

The city of Bergen lies on a rough peninsula at the head of a deep fiord. Back of the city rise the foothills of the mountains from which many of the people turn to the sea for a living. The hills are covered with trees which are always fresh and green. Do you wonder why the vegetation around Bergen is always so green? The moist westerly winds blow from the ocean, and as they rise to pass over the highlands, their moisture condenses and rain falls almost every day. As a result the hillsides are covered with heavy vegetation. These same westerly winds bring the even temperature of the sea to Bergen. As the air passes over the Atlantic, and especially over the North Atlantic Drift, it takes on the temperature of the sea. These winds make Bergen and other west ports cooler in summer and warmer in winter than they otherwise would be. The great slow-heating, slow-cooling body of water keeps the summer temperature pleasant and the harbors ice-free in winter.

Would you like to board one of the many sight-seeing steamers which you see lying in the harbor at Bergen and take a trip up the Hardanger Fiord near by? A trip up the Hardanger Fiord is full of unusual interest. "Smiling Hardanger" it is called. The water is deep and clear and you can distinctly see the bottom of the fiord. Cliffs three and four thousand feet high rise above the deck of the steamer. Trees cover the sides of many of the cliffs. Little farms snuggle at the heads of the small bays, and

red and white houses nestle in cozy places. Many hotels occupy favorable sites along the way. Finally the boat stops at a small pier and you see some of the passengers land. Possibly they will take another boat and go up one of the long arms of this fiord, or possibly they will travel inland over the excellent roads. As the steamer goes on, every type of Norwegian scenery gladdens your eye. Many great waterfalls tumble down from their hanging valleys. As you near the head of the fiord you see great snowfields. Glaciers are creeping down the valleys from the margins of the snowfields, moving so slowly that they seem to be stationary.

You may leave the boat at the head of the Hardanger Fiord and travel on excellent roads over the steep mountains. Would you like to get into a Norwegian cart drawn by a small, but sturdy, cream-colored horse and take this trip? There will be a seat for only one of you in each of these carioles and the post-boy will sit on the baggage behind. He will take you to the next post-house and if it is growing dark you may wish to stay there all night. You will register as at a hotel and be shown to a comfortable room. The next morning another post-boy will take you to the next posting station. All through the day, one boy after another "gives you a lift" until you reach the end of your journey. Do you know how these wonderful roads are kept up in this mountainous region? Each part of the road is kept up by some farmer and his name is placed on his section, so that all will know who is responsible for any part of the road. Even in winter he is supposed to keep his portion in as good condition as possible. In this way Norway maintains some of the best country roads in all the world. Farmers are glad to keep the posting stations or to maintain the roads, for they sometimes pay all of their taxes by doing so. A farmer works his horses in the fields until travelers appear. He then harnesses

Courtesy Norwegian Tourist Office

FIG. 8. Norway Balholmen. This is one of the most beautiful places in the Sogne Fiord and is a favorite spot with tourists. Notice that all flat areas are used for towns or farms. Why are they so used?

a horse to the cariole and is soon ready to take a traveler on the next lap of his journey.

This post route from Hardanger Fiord finally brings you to the head of Sogne Fiord, the longest and deepest of all of Norway's fiords. Here the cliffs are steep and barren and rise almost a mile above the surface of the water. Snow fills many of the gorges. At the north lies the lofty Jostedalsbrae, the great snow plateau. This field of ice is the largest continuous mass of ice in all Europe, for even the great snowfields of Switzerland are not so large. Traveling down the fiord, you leave the "wild giant mountains" behind. The great glaciers disappear from your view and waterfalls become lower and fewer in number. Outside the fiord you circle around among many islands and again reach the city of Bergen.

The country near Hardanger and Sogne fiords is no more rugged than much of Norway. Norway is the most mountainous country of Europe. Its high and rugged peaks extend in many places to the shores. The great mountain divide extends down the Scandinavian peninsula. The west slope is short and steep and on that slope lies a large part of Norway, extending like a great gourd from the Arctic Ocean toward the southwest. The eastern slope is long, and on it lies all of Sweden. Most of Norway faces westward toward the sea and that is why it is called the "Seaboard Nation."

Much of the coast of Norway resembles the region near Bergen. Beautiful fiords, by the hundreds, indent its entire coast line and carry the sea into the very heart of the country. We know that these fiords were made by the glaciers during the glacial period. But a story says that giants amused themselves by pulling up strips of land and letting in the sea, and that these same terrible giants threw mountains and islands at each other. We are sure it looks as if the giants had done these very things.

If all the coast line of Norway could be stretched out in a straight line, it would be ten times as long as Norway and would extend halfway around the world.

Not only has Norway this great length of coast line, but one hundred fifty thousand islands guard her irregular coast like a great "island rampart." Some of these islands are large, while others are merely rocks rising above the sea. Some are tree-covered; others are barren. Some are homes of happy farmers; fishermen live on the shores of others. Because of the long coast line and the many islands, nearly all Norwegians live within sight of the sea and the sea tempts them out.

Even in early days the people of Norway were seafaring people, and Norway was the land of the Vikings. You have read of their daring deeds as pirates. While the oldest sons remained at home to cultivate the land which they had inherited, the younger sons became adventurers and sought their fortunes on the sea. Before they left, the sound of the steady blows of their sharp axes resounded through the forests. From the timber which was felled they built their long, narrow boats. At the prow they carved a dragon's head; at the stern they fashioned his brightly colored tail; on the sides they painted gay shields. Then out they rowed, sometimes a hundred in a boat, to rob the merchant ships and to plunder the coast of Europe.

Later they used sailing vessels, and their striped sails added to the picturesque beauty of their brightly painted boats. This piracy began the great Viking Age, but with it came a change. Instead of plunderers the Vikings became conquering invaders and settlers. Their Norse camps were founded at the mouths of many streams. Some of them settled in Normandy, in France, and from there their descendants came as Normans to conquer England in 1066.

Like many of the Norwegians today, the Viking loved

the life of the sea. His faithful ship was to him what the horse is to the Arab. His boat often became his sepulcher. In very early days his dead body was sent to sea in his burning ship. In later times he was buried in his boat with his drinking horn and war implements beside him. The Norwegians are still a seafaring nation. The sea is so near that it is tempting even to the children. At an early age they learn to swim, row, and sail. They learn to love it, not to fear it. The Norwegian people have always turned toward the sea and away from the rugged, barren mountains.

The early Vikings found the material for their boats in the forests growing on Norway's rugged surface. Today the forests are still an important resource in Norway. If you were to travel from Bergen to Oslo by rail you would pass near the important logging districts. Much of the logging is carried on by peasants and small holders instead of by large companies as in Sweden and Finland. The farmers cultivate their small tracts of tillable land during the summer time, but often find it necessary to eke out their scanty incomes by fishing or logging in the winter. At that time some of them leave their small farms and go up into the forests to cut wood. There these peasants build their tiny log houses. In one corner of the room they make a bed of logs and cover it with moss for a mattress. They build a fire on a flat stone in the center of the room and keep it burning night and day. When they have finished their rude cabin, they begin their winter's work. They cut the logs, haul them to the nearest river, and pile them near the ice. Many owners put their logs into the same stream and so it is necessary to brand each log. When the ice breaks in the late spring, the logs are rolled into the river and floated downstream. On the main rivers there are floating associations whose business it is to see that the logs keep moving. If the logs pass

through lakes they are rafted for that part of the journey. There one sees acres of floating logs. They are often wedged so closely together that you could walk around on them with little danger of falling into the water. Canals

Courtesy Norwegian Foreign Office

FIG. 9. Norway. Agriculture is the principal industry in spite of the ruggedness of the country. The picture shows that even the steep slopes of mountains are used. Landslides are common. Why? What damage may be done by them?

have been constructed around rapids so that the logs can float in them and not be broken against the rocks. If you will look at your map you will find three parallel rivers, the Glommen, Drammen, and Skien. These are the important logging rivers of Norway.

At the end of the journey downstream the logs are sorted in a basin of quiet water. As many as 9000 are sorted in one hour. Then they are bunched by an electric log-bunching machine which can bunch as many as 30,000 logs per day. On the smaller rivers there are neither floating associations nor modern machinery.

If you were to visit the lake north of the city of Drammen during the summer you would probably find it full of floating logs. The steamers which ply across the lake bump first against one log and then against another. Near by are many mills where large quantities of timber are made into boards. These mills and other factories are run by the power furnished by the rivers which flow from the mountains. There are factories where the timber is ground into wood pulp for making paper; others manufacture paper to be used for the daily news; others make matches, ready-cut houses, box shooks, sashes and doors, and other wooden articles. These things are made not only for home use but also for export to many other countries. The factories furnish employment for many people who cannot make their living by farming because there is so little level land.

If you wish, you may travel from Bergen to Oslo by water instead of by rail. Entering the long fiord which leads to Oslo, you skirt the tree-covered shores. You pass several beautiful islands which are covered with fir trees and see attractive summer houses which dot these wooded islands. Many ships are entering and leaving the harbor. Many of these ships belong to Norway's large merchant marine; others belong to foreign countries. There are boats from Great Britain bringing cotton and woolen yarn, machinery, and metals. When these boats return they will carry timber, paper, and other wood products to Great Britain. They may also carry butter from the large dairy region southwest of Oslo. There

Courtesy Norwegian Foreign Office

FIG. 10 Norway. Many farms are at the heads of fiords; others are in mountain valleys. This is a typical fertile valley with snow-capped mountains in the background. Only 3 per cent of Norway is cultivated. Why? Notice the use of the mountain stream for power to run the sawmill.

are also boats arriving from the United States, loaded with oils and fats, cereals, and other foodstuffs. Other boats flying the Norwegian flag are bringing in coffee, sugar, meat products, flax, coal, and metals such as copper, zinc, lead, and tin.

Among the vessels one sees many interesting fishing boats unloading their catch or preparing to start out on another trip. There are also white-sailed pleasure yachts moving back and forth and passenger steamers crowded with happy tourists.

Christiania, the capital of Norway, has recently been given its old name of Oslo. Christiania, or Oslo, is situated at the head of the fiord, eighty miles from the sea. It is a modern city with modern docks and first class harbor equipment. In winter, large ice breakers keep the harbor open to traffic. Can you tell why the harbor of Oslo freezes over in the winter while that of Bergen is free from ice?

Oslo is a delightful place to visit in winter. The air is dry and cold and the ground is covered with snow. Members of the Storthing (Congress) and others go driving with their families and the sleigh bells ring merrily. The hill upon which the King's palace stands is given over to the children for tobogganing, and the public gardens are flooded to make an ice-rink for skaters. During one week of winter there is a great skiing contest. The one great ambition of every boy in Norway is to compete in this national sport. He spends many years in practice to acquire skill and great endurance. At the time of the competition, Oslo is filled with excellent skiers, delegates from all the clubs. On the first day there is a twelve or fifteen mile endurance test. One after another, the sportsmen start on the cross-country run and after the run come in exhausted. But the one who makes the best time thinks the victory well worth the effort. On the

10°
20°
NORTH CAPE
30°
70°
ARCTIC OCEAN
Hammerfest
Tromsö
LOFOTEN IS.
Narvik
LAPLAND
ARCTIC CIRCLE
ATLANTIC OCEAN
NORWAY
SWEDEN
Luleå
Torneå
65°
Gulf of Bothnia
FINLAND
Trondhjem
Sundsvall
JOSTEDALSBRE
Sogne Fjord
Hardanger Fjord
Bergen
Drammen
Oslo
Gävle
ÅLAND IS.
Gulf of Finland
60°
Upsala
L. Mälar
Karlstadt
Stockholm
ESTONIA
Stavanger
Christiansand
Nosköping
L. Wener
L. Wetter
Skagerrak
Göteborg
Jönköping
GOTTLAND
LATVIA
Kattegat
NORTH SEA
JUTLAND
Aarhus
ÖLAND
Karlskrona
DENMARK
Helsingborg
Copenhagen
LITHUANIA
55°
Odense
Lund
Malmo
Danzig
EAST PRUSSIA
Kiel
GERMANY
Railroads
Scale of Miles
0 50 100 150
GENERAL DRAFTING CO. INC., N.Y.

next day there are ski jumping contests on a hill outside the city. The spectators stand spellbound as one after another of the skiers leaps into the air and strives to land on his feet.

Some of these hardy skiers no longer live in the rural region in which they were born. They now live in Oslo and work in the factories which have been built here because of the water power in this region. Cotton, linen, and woolen goods, paper, furniture, iron wares, matches, chemicals, and many other useful things are made in Oslo.

Oslo is a railroad center. One of the main lines runs northward to Trondhjem on the west coast. A trip over this line will take you through the chief farming regions of Norway. Have you been wondering where the farms are in this rough country? You have seen some on the deltas at the heads of the numerous fiords. On those rich, flat areas many of the best farms are found. There are other small farms in the narrow mountain valleys. But the largest farming districts in Norway are along the Skagerrak and in the valleys between Oslo and Trondhjem. Traveling northward from Oslo to Trondhjem you slowly ascend the broad valley which leads up the divide. Then you descend through another large valley to Trondhjem. On this trip you are in the midst of fertile farms. You see fields of oats, rye, and other cereals. There are dairy farms like those along the shores of the Skagerrak. You notice that the hay fields look quite different from those in our country. In Norway the hay is hung over stakes or racks to dry, for the climate is so moist that the hay would not dry if left on the ground. You see both men and women at work on these farms, for as much work as possible must be done during the short summer.

Each farmer, with the aid of his family, works his own small farm. He spends most of the short summers in

getting ready for the long winters. On his tiny piece of level land he raises the potatoes, hay, oats, barley, and rye which he needs. On a piece of higher land he pastures his cattle. As soon as the snow disappears, many of these farmers drive their cattle to the out-farms, or saeters, in the high mountain valleys. There the cattle feed on the fresh grass and the fair maidens make butter and cheese.

Courtesy Norwegian Foreign Office

FIG. 11. Norway. An outfarm, or saeter, in the high mountains. Every spring cattle are taken to saeters where they feed on fresh mountain grass. On these saeters Norwegian cheeses have been produced for centuries. Why is it necessary to use these high valleys?

Not all of the cheese and butter of Norway is made on the saeters. Today many of Norway's dairy products are made in factories, especially in the rich farming region along the Skagerrak.

The peasant's home is usually under several roofs. One building may contain the living rooms, another one may contain rooms for the men employed to work on the farm, and a third may be a storehouse for the many winter

supplies. All are very neatly kept and the living-room is a very homelike place. In the room is a great fireplace where the wood fire blazes all winter long. In one corner there is a plain table, and benches behind it supply places for some of the family to sit at meals. This "cozy corner" is common in many countries of Europe. The bed is in another corner of the living room. The bed might be a little disappointing to you, for after climbing up several steps to creep under its wooden top you are likely to find that it is not as long as you are.

If you dined with one of these Norwegian families you would probably taste a kind of bread that you have never had before. The climate of Norway is too rainy and cool for raising wheat. So the real Norwegian bread is made of oatmeal and rye. It is called "flad brod." It is flat, too, for the housewife rolls it "as flat as a pancake" before it is baked. Dried fish, potatoes, and cheese are common foods in Norway.

After traveling through this farming section you reach Trondhjem on the west coast. Trondhjem means "throne home." This city is the most famous of all the Norwegian towns. It has been called "The City of the Kings" and "The Cradle of the Kingdom." Formerly it was the capital of Norway. During the last thousand years the Norwegian kings have been crowned there in St. Olaf's cathedral, although the capital is now at Oslo. Why was this rich valley a good place for the capital?

Trondhjem is a quaint city of wooden houses and wide streets. Grass and flowers beautify the surroundings. In the market place one sees the peasants bringing in their wares in their small wooden trunks. As they open them we glance inside and see rows of cheese, butter, and vegetables. Others contain home-spun wool and linen and pretty embroidered articles, for the peasants' fingers are very skillful.

There are shops, too, in Trondhjem where the tourists can buy filigree work, carved tankards, and pipes, which the peasants have made during the long winter. There are other shops in which the tourists buy furs and reindeer antlers to take home as souvenirs of the cold North. One sometimes finds coats lined with eiderdown. Have you read of the eiderduck? It is a native of this northern country and builds its nest high up in the crags. The careful mother duck plucks the softest feathers from her breast to line her nest in order to have a soft place for her young to be hatched. The daring hunters rob the nests and sell the feathers.

Though Trondhjem is 64 degrees north of the equator, its harbor, like that of Bergen, is never frozen. One is surprised to find many products exported from this northern city. The boats are loaded with copper, lumber, wood pulp, fish blubber, and oil. When they return they bring coal, salt, grain, and machinery. Can you tell why each of these products needs to be imported?

If one leaves Trondhjem and travels northward during the winter or early spring, one sees many cod-fishermen near the Lofoten Islands. It is at that time that the cod leave the deep water of the ocean and come into the shallow water along the shore to lay their eggs. Then the fishermen's boats are loaded with fish. On the mainland one catches a glimpse of the port of Narvik. Although located within the frigid zone, Narvik is a railroad terminus. From it are shipped iron ore and other products of Sweden, especially during the winter when the harbors of northern Sweden are frozen over.

As one goes northward one follows up the fishing industry. Here in this northern clime there are many fish canneries and packing companies. Here, too, the whaling industry is important during the years that whale hunting is permitted.

The farther north one goes the more interesting the towns seem to become. Is it because one is surprised that there are so many small towns in such high latitudes? Or is it because we are interested in new things? Certainly we are interested in Tromsö. Who are those strange people encamped in the neighborhood? They are the

Courtesy American-Scandinavian Society

FIG. 12. Norway. Fishing booth, Lofoten Islands. The lines with hooks have been arranged in order on fork-shaped instruments and the men are rebaiting with the fresh fish seen in the foreground. Why are these fishermen so sturdy?

Lapps, and Tromsö is called "the city of the Lapps." When the tourist boats stop at the port, the Lapps gather around and offer for sale reindeer horns, walrus tusks, fur, and many small trinkets.

One would not wish to go to Tromsö without going to Hammerfest, "The City Farthest North." Sailing northward along the shore, one notices that the full-sized trees

become fewer and fewer and stunted birches and junipers take their place. Now one is in a region where a patch of grass as large as a good-sized newspaper is sometimes called a meadow. One observes, too, that these so-called meadows are cultivated with great care.

What has built up this island city? Is it the trade of the tourists who come each summer to the Land of the

Courtesy American-Swedish News Exchange

FIG. 13. Lapland. Many Lapps live in tents during the summer. This picture was taken in northern Sweden.

Midnight Sun? No, it is the fishing industry, for here "Fishing is King." Hammerfest is also the home of a great fleet of ships which capture whales, seals, and walruses. Here, too, hundreds of fishing boats on their way to the northernmost shores stop to get their supplies, for, though Hammerfest is 1000 miles north of Oslo, its harbor is never frozen.

If one is in Hammerfest at a time when whaling is not prohibited in northern waters, one sees large whales being towed into shore. There the valuable whalebone is taken from the roof of the male whale's mouth. Great slabs of blubber are seen lying on the shore ready to have the oil tried out. There are many casks of oil ready for shipment, for sometimes one large whale yields enough oil to fill sixty or seventy casks. Seal oil and cod liver oil are also being extracted. The smell of burning oil fills the air. One is glad to get away from the great vats of hot oil and go along the shore where large quantities of cod are being dried.

Hammerfest is in the alluring and fascinating land of the midnight sun. Would you like to live in a town where the sun stays up from May 13 to July 27? And would you like the long cold winter darkness which continues for sixty days, in which time you would not catch a glimpse of the sun?

Every place within the Arctic Circle or within the Antarctic Circle sees a midnight sun. If you were to go to the Arctic Circle in midsummer, you would have daylight continually for about twenty days. At midnight, you would see the sun in the north a little above the horizon. As the earth rotates, the day advances and the sun circles around to the south, gradually going a little farther above the horizon. At noon it is in the south and has risen about halfway to the zenith. During the afternoon it advances westward and by midnight it is back again in the north. Then it begins to describe another circle around the sky, this time a little higher than before. For ten days the sun continues to describe this spiral around the sky, each time getting a little higher. Then for another ten days it describes ten more curves in the spiral, each curve this time being slightly lower than the preceding one. Can you make believe that you are standing in that northern

latitude and point around your own sky to what the sun's path would be? If the atmosphere did not bend the rays of light as they come from the sun, a point on the Arctic Circle would have only one day with a midnight sun instead of twenty.

If you were to go still farther north you would have a still longer period of continuous daylight and the sun would make a greater number of spiral turns. At the North Cape the sun rises on May 13 and does not set until July 31.

We are not accustomed to having the sun describe a circle in the sky. Here in the United States which is in a lower latitude the sun's path is almost equal to a semi-circle every day in the year. But in the frigid zones in summer it describes circles around the heavens during the period of continuous light.

In winter all is changed. The sun which stayed up for a period of days now disappears and circles around below the horizon. Then there is a period of continuous darkness. The farther north one goes the longer the sun stays down, until finally at the North Cape the sun sets on November 18 and does not rise again until January 24. If one were to go still farther north on the Arctic Ocean the summer daylight and the winter darkness would be still longer.

How would you like to live in one of the frigid zones where there are four seasons which in some ways are very different from ours? Would you like a season of continuous darkness in which you must play and work as well as sleep? The street-lights would burn "all day and all night" for it would really be all night. You would rise in the morning in the dark. You would go to school in the dark and your teacher would have to see that the schoolroom was lighted. You would also go home in the dark. There would be stars and the moon and the wonderful northern lights, called the aurora borealis, but no sun.

You would be glad when a twilight period commenced, telling you that the sun was just below the horizon.

Then the sun would peep above the horizon, and, although it would not stay long on the first day of its appearance, how glad you would be! Its appearance announces the second season, in which the sun rises and sets each day. Each day the period of daylight grows longer and the period of darkness shorter.

Then there would be a third season of continuous daylight, and how busy you would have to be! The sun seems to forget to go down; it is warm and vegetation grows. In this short growing season there are crops to be raised, wood to be found, and fish to be cured. Can you believe that in June there are more hours of sunlight in northern Norway than there are in central Italy?

Then would come the fourth season, much like the second, in which the sun would appear and disappear each day. Each day it would stay down for a longer time to give you warning that you had but a short reprieve before the next long winter night.

Many tourists go to North Cape to see the midnight sun. This famous point is not on the mainland, but it is a peninsula on a northern island. It is wild, rugged, and barren, and its slate rock has a somber hue. Then why do so many visit it? They wish to see the midnight sun as high above the horizon as possible. There, too, the weather is least likely to be rainy or foggy and to hide the skies. So the tourist boats are often well filled. The steamboat drops anchor out from the shore and the passengers get into rowboats. A steep cliff rises a thousand feet above them. They cling to a securely fastened rope and climb up the steep ascent. They reach the mossy bank above and stand on the edge of the bluff. The gun on the boat is heard. It is midnight! The midnight sun lies low in the north.

Courtesy Norwegian Foreign Office

Fig. 14. Norway. North Cape. The most northern point of the world visited by tourists who come here each summer to see the midnight sun. This cape is 1200 feet high and noted for its somber grandeur.

SWEDEN

In some ways Sweden resembles Norway; in other ways it differs. Norway occupies the short western slope of the Scandinavian peninsula and most of her rivers are short and have many rapids and waterfalls. Why are those rivers not suitable for floating logs? Sweden occupies the long eastern slope and the rivers are swift only near their sources. For much of their length they are very valuable for floating logs. Norway faces Great Britain and the other countries of the North Sea; Sweden faces the Baltic states. Norway's first interest in commerce is in that which crosses the North Sea; Sweden is much interested in the peace and prosperity of the Baltic countries and in her trade with them.

Norway is, mostly, a land of great plateaus, rocky peaks, large glaciers, deep fiords, and small cultivated valleys. Sweden has some rugged land and some glaciers, but much of her area is occupied by rolling hills, rich meadow lands, low marshes, thousands of lakes, and broad cultivated fields. Both countries have long seacoasts and many harbors, but Norway's coast is indented by dark fiords with strong tides, while Sweden's eastern coast is marked by low, tideless bays. Explain why the eastern coast of Sweden does not feel the tides.

Both countries are skirted by many islands. Those which border southern Norway are small and many are covered with luxuriant vegetation; toward the north, the islands are large, but there they are high and barren. Sweden is more fortunate, for her larger islands lie toward the south and are very productive. The winds blow directly from the ocean over Norway and keep her western harbors ice-free all the year. Sweden receives the cold air from the mountains and all of her eastern harbors are frozen over during the winter.

Both countries extend into the high latitudes beyond the Arctic Circle where land is of little value to-day. Both countries have short summers and long winters; and both have long summer days and equally long winter nights.

Not only are the lands much alike; the people are similar also. The Swedish people, like the Norwegians and the

Photograph by G. Heurlin

FIG. 15. Sweden. On a country road. What means of transportation are seen in the picture? Automobiles traverse these same roads while airplanes fly above them. Why are wooden fences so common?

Danes, are descendants of the sea-loving, seafaring Vikings. From the lands now called Denmark and Norway, the Vikings sailed to the countries bordering the North and the Mediterranean seas; those from the area now known as Sweden spent much of their time invading the countries surrounding the Baltic Sea. There they conquered and colonized parts of Finland and Russia. Because most of the people of Denmark, Norway, and Sweden are

descended from the same people, they speak languages which are very much alike. Why would they have the same way of doing many things?

Norway and Sweden have many of the same industries: fishing, shipping, sailing on liners and coast-wise vessels, farming, logging, lumbering, and manufacturing. But some of these industries are more important in one of the countries than in the other. Let us see how and why these industries differ in importance.

Neither fishing nor shipping is as important in Sweden as in Norway. What effect would the freezing over of the eastern harbors of Sweden have upon those two industries? Then, too, Sweden has large areas of good farming lands. Many of her people can make their living in agriculture. What effect would that have upon fishing and shipping?

Along the southwest coast, near Göteborg, the ports are more nearly ice-free than in other parts of Sweden and there the fishing industry is more important. From those harbors, the daring fishermen sail out to the deep seas to catch the herring and the mackerel. Few of them go to the cod fishing regions. Can you tell why? While Norway exports large quantities of fish each year, Sweden does not catch enough for her own use.

Sweden's merchant marine is also smaller than that of Norway, although the population of Sweden is more than twice as great. While the merchant marine of Norway ranks eighth in the world, Sweden's ranks tenth. While Norway has one ton of merchant marine per person, Sweden has only one ton to each four people.

Sweden has about four times as much land under cultivation as Norway. Why? Part of southern Sweden is called "the garden of Sweden." There the climate is mild and many kinds of crops flourish. Which one of these two countries extends farther south? Which part

of Sweden receives winds directly from water bodies? Give two reasons why the climate is milder in southern than in northern Sweden. In many ways southern Sweden reminds one of the rolling hills of southern England or of our dairy region in southern Wisconsin. There are rich meadows where cattle graze, and dairies where butter is

Photographed by G. Heurlin

FIG. 16. Sweden. Landscape in the southern part of the country. What industries are represented in this picture?

made for home use and for export. There are many fields of wheat as well as of rye, oats, and barley. Why does Sweden produce more wheat than Norway? There are fields of sugar beets, potatoes, and turnips, and also large tracts which produce hay for the winter food of the numerous dairy herds.

In this farming section one sees many red farmhouses with doors and windows neatly trimmed in white. Nearly all the houses are made of wood. Why? Both houses

and stables must be very well built in order to furnish a warm winter shelter. Near the houses, during the summer time, one finds pretty flowers and vegetable gardens containing potatoes, carrots, peas, and sometimes cabbage and spinach. In the orchards are pear, apple, and cherry trees. If one were to enter a peasant's cottage, one would

Courtesy American-Swedish News Exchange

FIG. 17. Sweden. In a typical cottage. Which objects in this room were probably made at home? At what time of the year were they made? Why?

probably find a porcelain stove, common in northern Europe. On cold winter mornings a fire is built in this stove. When the embers are glowing the stove is closed tightly and the heated air passes through the air chambers of the stove. The stove remains warm from a single fire for several hours, but most of us would find that these stoves do not keep us warm enough.

In traveling through this "garden of Sweden" one also

passes large manor houses, homes of some of the wealthy. These estates are sometimes very large, so that one must ride a few miles to the nearest neighbor. There are also ancient stone castles, some of which were built in the thirteenth century. Often the road carries one through a dark wood. Sometimes one comes to a village where a small flour mill makes the farmer's rye into the coarse flour used throughout the country. In other parts one passes windmills which are used to grind the grain. Would this be a beautiful country through which to drive?

In central Sweden one finds fewer fields of wheat. There, rye takes its place, and still farther north barley is the common crop. The farther north one goes, the less land one sees under cultivation. In some of the southern provinces more than one-half of the land is tilled; in the northernmost part, less than one-hundredth.

In the rural districts of central Sweden, especially, one can see the peasants celebrating the "Midsummer Eve," when the sun gets farthest north and they have their longest day. Then, in southern Sweden, the sun disappears for only a short time. In northern Sweden it does not disappear at all. On that glad festival the Maypole is the center of their festivities. It is not only a pole; it has several cross-arms. They trim it with boughs of birch and beautiful flowers and then they dance gaily around it. Sometimes they dance throughout the light night.

Logging and lumbering are important industries in both Norway and Sweden. Norway has about one-fifth of its area in forest land; a little more than one-half of Sweden's area is covered with forests. Southern Sweden has many woodlands; the northern half of Sweden, which is an area as large as Great Britain, is almost a continuous tract of forests crossed by many rivers. It is a land of dark pines, firs, and spruces; of noisy waterfalls, of quiet lakes, and of

valuable rivers; a land of logging and lumbering; a land of one of Sweden's greatest resources, her forests.

If you will look at your map you will notice that many of the Swedish rivers rise in the high mountains between Norway and Sweden. They flow in parallel valleys and

Photograph by G. Heurlin

FIG. 18. Sweden. Landscape in the northern part of the country. What great natural resource of Sweden is seen in this picture? What great difference do you notice in the landscapes of northern and southern Sweden?

through many lakes toward the southeast. There are sixty important rivers flowing into the Gulf of Bothnia between Stockholm and the northern boundary of Sweden, and there are many others of less importance. These numerous rivers are almost as valuable in the lumber industry as the forests themselves.

There are several reasons why these rivers are particularly valuable for floating logs. Most of them have their

sources several degrees farther north than their mouths. When spring comes they begin to thaw at the mouths. Why? The thawing continues upstream and finally reaches the upper course. What effect would that have upon spring floods? Why are floods a disadvantage in floating logs? Some of the rivers have their sources at the glaciers. The melting glaciers help to keep the stream of uniform depth. How is that an advantage? Then, too, since the rivers flow southward they carry the logs nearer the market as well as to a port. How is that of value? Sweden has 16,000 miles of timber-floating channels, three-fourths of which are in the northern part.

As in other cold countries, most of the cutting of the logs is done during the winter. The logs are hauled to the rivers on long sledges and in the spring and summer they are floated downstream.

In Norway much of the forested area is owned in small tracts; in Sweden a large part of it is in large estates. Because of this the floating associations are more important in Sweden than in Norway. You have read of the cooperative societies in Denmark; the floating associations are also coöperative societies. These associations have charge of the floating of logs. When a group of floaters (men who have logs to float) along a given stream wish to form a floating association, they apply to the government. The government, after investigating, generally declares the given river open for public floating. An association of all the log owners is then formed. The association may construct flumes of timber to float the logs around waterfalls. It sometimes blasts rocks which lie in the river bed. Why are the rocks removed? The association may also build dams to regulate the depth of the water, and construct chutes for carrying the logs around the dams. The society frequently finds it necessary to place booms for protecting the low land along the edge of the streams.

The river is divided into districts seven to fourteen miles long. When all is ready and the late spring comes, each district is put in charge of a gang of men. Each gang receives logs from the district above, floats them on down through its district and into the next district. How could they notify the gangs higher up the river if they wished logs sent more slowly? When might they wish to have them sent more slowly? Very frequently the logs must be towed across lakes and then they are made into rafts for that purpose. When the logs reach the end of their journey they are sorted in the sorting basins, some of which receive as many as twelve million logs per year. From there they are loaded on steamers for export or go to the sawmills, most of which are near the mouths of the rivers.

There are more than two hundred and seventy floating associations in Sweden and these have charge of more than seventy per cent of all the floating. Before the associations were formed, many of the logs spent two summers on the trip downstream. Now the associations carry them down at the rate of seventy-five miles a month. Since the floating begins in May and ends in October, most of the logs complete the journey in one season. They are, therefore, less likely to become water-soaked. What is the disadvantage in having them water-soaked? Why are fewer logs likely to be broken now? Some of the associations own salvaging cranes which are mounted on barges and are used for raising sunken logs. At the end of the season each member of the floating association pays in proportion to the number of logs he has floated. How are they all benefited by working together?

Great Britain is the largest market for Swedish timber. Is it any wonder? Sweden has almost ten acres of forests per person while Great Britain has less than five-hundredths of an acre for each. While Sweden exports timber to

Great Britain, she buys, in return, large quantities of coal, for she has almost none of her own. As in Norway, many of Sweden's industries are connected with her forests.

Today the majority of Sweden's mills are sawing and planing mills; there are fewer pulp and paper mills. Some of the wood of Sweden, especially the aspen, is used in the famous match industry. Safety matches were invented in 1852 in Sweden and their manufacture is now a very important industry. The city of Jönköping, at the southern end of Lake Wetter, has long been known as a match center. There, one machine fills 40,000 boxes in one hour. These, and many other factories in which wooden goods are made, furnish work for hundreds of people.

Not only are the rivers of Sweden of great value in logging, but, like the rivers of Norway, they furnish an abundance of water power. Some of that power is used in running the factories which are located chiefly near the mouths of the rivers; some is used in running electric trains in the iron ore region of northern Sweden; and some is used in other industries. Norway has more water power than Sweden, but it is estimated that either one of them has more per 1000 inhabitants than Switzerland has. Both of these countries have developed only a small part of their water power; in both countries it will be of more value in the future than at the present time.

Norway has no metals which are of great importance; Sweden has some of the richest iron mines in the whole world and has a large iron and steel industry. Some of these valuable iron mines are in the northern part; others, more than 300 mines, are in central Sweden. Most of the ore from the northern mines is not smelted in the north. During the summer some of it is exported via the ports of the Gulf of Bothnia. During the winter it is shipped by rail to the Norwegian port of Narvik. Large quantities of the iron ore produced in central Sweden are

used in the many blast furnaces of that region. Other factories make the pig iron into steel. Sweden has such large quantities of iron ore, that ore and also iron and steel products are among her main exports. The Swedish iron ore is of unusually good quality and some is shipped

Courtesy American-Swedish News Exchange

FIG. 19. Sweden. A courtyard in a village. Courtyards around which families live are common in many parts of Europe.

to both England and the United States. Most of the surplus, however, is used in the other countries of Europe.

Sweden has very little coal and so her forests were made to furnish charcoal to be used in the smelting of iron. Her lack of coal has helped to make her steel famous. By using charcoal instead of coal, Sweden developed a method of making better steel than could be made with coal. To-day Sweden ships the highest grade of steel to many different parts of the world.

Norway and Sweden are much alike in the way their people are distributed over the country. In both, the population is denser toward the south. Why? The population of Norway is densest along the Skagerrak and in the lowland areas between Oslo and Trondhjem; the population of Sweden is densest along the southern tip and in the lowland belt between Göteborg and Stockholm.

If you will look at a relief map you will see that the basin of the Skagerrak continues through the Swedish lowland area into the Gulf of Bothnia. The sea once covered the lowland, and at that time the southern part of Sweden was an island. Later the land rose, but the trough through which the sea had passed remained a lowland. Today this is the heart of Sweden connecting its two greatest cities.

The population of Norway is attracted to the richer farming regions. This is also true in Sweden but there are other reasons why many people live in the lowland belt. It is rich in iron mines; there are many blast furnaces which make pig iron; there are mills which turn out steel; and there are factories which manufacture iron and steel goods. Because there are many factory workers, and also because electric power is well developed in this region, many other factories have been built there also. Then, too, the lowland area furnishes easy transportation. Why is it cheaper to build railroads in a lowland than in a hilly or mountain area? Why is it cheaper to operate them?

In addition to the railroads, Sweden's lowland belt has an excellent waterway for carrying both freight and passengers. This waterway is called the Göta Canal. This so-called canal is really not a canal. It is a series of waterways beginning at Göteborg with the Göta River. After traveling up that river, one enters a canal which, by means of locks, carries one around great waterfalls. Then Lake Wener furnishes a natural channel. A series of canals,

locks and small lakes takes one to Lake Wetter. By means of another series of waterways the Baltic is finally reached. Then for fifty miles this so-called canal winds amidst wooded islands in the Baltic Sea. Another short canal brings one to Stockholm. This waterway is 370 miles long but only one-seventh of the distance is in canals. In

Courtesy American-Swedish News Exchange

FIG. 20. Sweden. A scene on the Göta Canal. Some parts of its course are artificial channels; other parts are rivers or lakes.

order to carry a boat from one level to another there are seventy-six locks and the entire journey takes about fifty-six hours. How could this waterway be used for transportation during the winter? Describe what you would be likely to see if you traveled from one end to the other in the summer.

Lakes Wener and Wetter are among the largest of the European lakes. These lakes and many smaller ones

Courtesy American-Swedish News Exchange

FIG. 31. Sweden. A part of the port of Göteborg. The Free Port is marked in white in the center. Goods from many parts of the world are delivered here, handled, and reshipped without payment of duty. For what purposes are the other docks in this picture used?

contain fish. What industry is thus added to the others in the lowland belt? After reading about this lowland belt, name five main industries in which the people of this region are engaged. Name several other ways in which the people of this region make their living.

Bergen may be called the western door of Norway; Oslo, its eastern door. Göteborg is the western gateway of Sweden; Stockholm, its eastern one.

Göteborg lies at the western end of the lowland belt and is the most important port in Sweden. Its harbor is dotted with numerous islands. Some are famous resorts; others are the homes of fishermen. As one approaches Göteborg, one notices a rocky hill crowned by an old stone castle. On coming nearer, one sees the main part of the city lying low along the busy waterfront. Through this harbor pass many of the exports from Sweden and also the imports of cereals and other foreign products.

Along the river on which Göteborg is located there are many different types of boats. One part of the harbor is used by the large ocean liners and other steamers from the North, Black, and Mediterranean seas. Another section is filled with smaller boats which ply on the canals and rivers. In a third section one finds shipbuilding yards and dry-docks. The bustle of the harbor reminds us that Göteborg is certainly Sweden's door to the west.

Stockholm is the eastern door for the prosperous lowland belt. Through its harbor many of the products of the surrounding regions are exported, and many raw products are imported for the factories. Stockholm is also the most important manufacturing city of Sweden. There are iron and steel mills, machine shops, sugar mills, and wood, porcelain, glass, leather, textile, and other factories.

Stockholm, the capital, was founded when Sweden ruled the Baltic. Why was the capital located on the eastern instead of the western shores? The word "holm"

means island, and as the name tells you Stockholm was first built on islands. It is situated where the waters of Lake Mälar flow into the Baltic Sea. Today the city has spread so that only a small part of it is on islands, but its many waterways, used as thoroughfares, give it the right to be called "the Venice of the North." These waterways, and also the numerous parks, add much to the city's beauty and its charm.

Both the Norwegian and the Swedish cities of early days were built of the wood which was so plentiful. How were many of those buildings destroyed? Consequently Stockholm, like Oslo, but unlike many cities of Europe, has few old buildings. On the whole, Stockholm impresses one as a modern city even within the older part.

Stockholm is the center of Swedish sports, as Oslo is the center in Norway. During the winter time the "Northern Games" are held in Stockholm. These games continue for nine days with contests in skating, ski-running, ice-yachting, skate-sailing, hockey, curling, and all the other outdoor winter sports. At the Northern Games one would see representatives from all the Scandinavian countries and from Finland, England, Holland, Germany, and Austria. Why are there no contestants from the Mediterranean countries?

You have read of some of the ways in which these two interesting countries are alike and ways in which they are different. Which one of the two countries would you most like to visit?

Finns conquered by Russia - March 6, 1940
Stalin

Chapter II

FINLAND

Across the Gulf of Bothnia from Sweden lies Finland, another northern country and one of the new republics of Europe.

The most delightful way of reaching the country is by a boat trip from Stockholm. That route will take us among hundreds of islands, both large and small. Some are covered with fir and pine, while others bear the glistening white birch. Peasant folk on the islands watch the boats pass, and fishermen sit on the banks, mending their nets. Fishing boats glide by and we hear the happy greetings of "Elakoon Suomi,"—"Finland forever!" Beautiful summer houses are scattered over the islands. Some of the islands are tiny and crowned with bare granite. Some few are small reed-rimmed meadows. In places, the channel is so narrow that you could almost jump from the boat to the shore. Farther on, the route is marked by posts rising out of the sea or by signs on the rocks. During almost the entire trip, land is so near that we seem to be taking a river trip rather than crossing a large gulf. At the southwest corner of Finland, the series of islands divides into two parts. One chain skirts the shore to the north; the other dots the southern shore with hundreds of small islands.

These islands have always been the stepping stones which have guided boats from Sweden to Finland. In the Middle Ages they were followed by the sailing vessels of Sweden. By this route the early Swedish settlers came

Courtesy Finnish Legation

FIG. 22. Finland. A costume of Karelia, the southeastern part of Finland.

to the southern and western shores and settled in the land of the Finns. It was along this route that the Christians came to convert the native people. Finally, the conquerors came and in the twelfth century united Finland with the Swedish kingdom. Is it any wonder that Åbo, located on this southwestern point, became, for a time, the capital of Finland? The city is fittingly called "the cradle of Finnish culture." Here in the river the first Finnish Christians were baptized, on the bank the first cathedral was built, and here the first school was established.

Landing at this interesting spot, we shall find Åbo, like so many other cities, located astride a small river. A thirteenth century cathedral stands on the bank of this river, and a short distance away is the old castle, but there is little else to remind us of the past. Rows of wooden houses with bright flowers at the windows, modern apartments, large factories, and lumber yards remind us only of our modern age.

Near the cathedral we shall find the open-air market place, the largest in Finland. Along the edge of the river we see the boats of the fishermen who have come in to sell their last catch. From the surrounding country come the gardeners, bringing their produce to market in their two-wheeled carts. They unharness their horses and turn their carts into stalls for selling their vegetables. The dairymen bring in their supplies of fine butter, milk, and cheese. The thrifty housewife, the blue-eyed maiden, and the faithful servant come to buy the day's supply. The fat droshky-man driving past reminds us that Finland was, quite recently, a part of the former Russian Empire.

In Åbo, as in some other cities of Finland, the streets are named in both the Swedish and the Finnish language. In this region there are many Swedish-Finnish families that came over during the period when Sweden ruled Finland, and consequently the Swedish language is often

heard. In the rural districts of this region there are many large estates owned by Swedish-Finnish people.

We may go by boat from Åbo to Helsingfors, passing the long peninsula on which the port of Hango is located. All winter long, the great ice-breaking boats plow through the ice and keep the Hango harbor open, while the other ports of Finland are ice-bound. Freight from Helsingfors and from other parts of Finland goes out through this harbor during the winter.

Going eastward past Hango, we approach the capital and largest city of Finland, the beautiful Helsingfors. Sveaborg, "Gibraltar's sister in the north," is the old fortress which stands guard over this harbor. The tree-covered islands which follow all the southern shore of Finland also dot the harbor of Helsingfors. As we draw nearer, the slender towers of the city appear. We see great steamships and small sailing vessels on their way to foreign ports.

Landing in the city, we are delighted with its appearance. The streets are broad and clean. The posters are tied on trees and posts, and when they have served their purpose all signs of them disappear. There are many beautiful public buildings, well-kept parks, modern stores, and up-to-date hotels. The rounded dome of a Russian church recalls the Russian days in Finland. The pleasant apartment houses and the people themselves recall our middle western towns of similar size. During the summer free concerts are held twice each day in the esplanade. The beautiful walks, the trees, the band stands, and the neat cafés make it difficult to realize that we are in a city as far north as the southern point of Greenland. In summer, in their "white night," one can see to read a newspaper without artificial light even at midnight.

In winter the scene changes. The long summer days give way to the long winter nights, and Helsingfors

becomes the center of winter sports. Large skating rinks, hemmed in by protecting fir trees and enlivened by electric lights and music, are the meeting places for many who love sport. Tobogganing, skiing, and hockey entice others into the cold air. Some enjoy a push sledge, a light chair on runners. The man who runs it stands with one foot on one of the runners and pushes against the ground with the other foot. This way of traveling seems as successful in winter as bicycling in summer. There are reindeer-driving races on the ice and they are novel sights. With all these active winter sports, is it any wonder that these people are a sturdy race?

The Finnish people are also good students. There are public schools for all, and at Helsingfors there is a National University attended by both men and women. Finland, like the other countries of northern Europe, has few people who cannot read and write and it was the first nation to give women the right to vote. Because many of the Finnish women are well educated, they occupy many public positions and are today members of the Diet, the Congress of Finland.

In Helsingfors, we hear the people speak fondly of a city which they call "the Manchester of Finland." Let us board a train and travel inland to this city of Tammerfors. The trip will take us northwest through a region which has many farms. We should watch this region through its changing seasons, to understand the life of the Finnish farmers.

In the summer time there are many dairy herds grazing on the meadow lands. The farmers and their families are busy in the fields. Some of them are cutting hay and hanging it in the sun to dry. There are many fields of barley and rye, for those are the main cereals raised in Finland. Why? There are also fields of oats and flax, and others of potatoes and root-crops. Near the houses are vegetable

gardens where some of the family's food is raised. These people are very busy, trying to raise a large part of the year's food for themselves as well as for their cows and other farm animals. The summer is short, but the days are so long and warm that fewer days are needed. The barley in this region ripens in about 116 days. Just beyond the

FIG. 23. Finland. Harvest time. Rye is the most important grain crop and thrives as far north as the Arctic Circle. Notice that trees are always an important feature of the landscape in Finland.

Arctic Circle the barley matures in an even shorter time, in about 63 days, for there the summer days are both longer and warmer.

In the fall, the scene in this region is different. The threshing is done and the grain stored away for winter use. The root-crops are harvested and the family supply of vegetables and fruits carried in. The barnyard fertilizer which has accumulated is hauled out and spread over the culti-

vated land. Some of the plowing is done before the ground freezes. The farm implements must be stored away, the fences and buildings repaired, and everything made ready for the cold, the snow, the wind, and the long nights of winter.

During winter, some of the farmers settle down to a less active life, but some continue to be busy. The dairy

Fig. 24. Finland. Dairying is an important industry. Smoke from smudges keeps mosquitoes away from the cows. Where are the cows milked in winter?

farmers must still care for their cows. During the greater part of the winter, the farm animals stand in the warm barns and eat the food which was raised for them during the summer. Do you wonder that the Finns have a saying that "if one wishes to have a good time in Finland one should be a cow"? In return for the care which the cows

Fig. 25. Finland. What in this picture suggests long, cold winters? This view is characteristic of much of Finland. What suggests one of the chief resources of the country?

receive, they supply the Finnish people with very important articles of food—milk, butter, and cheese. Before the World War, the dairies furnished all the butter used in Finland and also enough to export a quantity equal to 7½ pounds per person. Cheese, too, is an article of export. In the winter, the surplus dairy products must be taken to the markets. Some of those products are transported over the snow-covered dirt roads, but some are carried over new routes formed by the frozen rivers and lakes. The dairy products which are exported from Finland are carried to the ports over railroads.

There is other work for farmers in winter. Most of them have their own wood lots. In winter, trees are felled and cut up to furnish material for fences and buildings as well as for fuel. Some farmers who have large forest tracts, cut and sell some of their logs; other farmers work for large logging companies in the winter.

The housewives on the farms also have their winter work. They still do some spinning and weaving in their homes. In the winter they make most of the clothes that the family will wear during the year. In some parts, much time is spent in trimming them with handmade embroidery and handmade lace. There is also knitting to be done, and the household linen and bedding need some attention. In some regions the grain must be ground. All of these duties, with the care of the children, the preparation of the meals, and the care of the home, keep the housewife occupied during the long winter. It is during the winter that most of the Finnish children are sent to school.

Not all the route between Helsingfors and Tammerfors is through farm lands. After passing one farming section the train enters a dark forest. Coming out of the forest, we are again in the midst of cultivated land. Thus the trip continues, with forest tracts and farm lands alternating with each other. We pass, also, boggy marshes, numerous

lakes, and rapid rivers. As we go farther north, the cultivated land becomes less and less, while the forests become more numerous. As we see all the beautiful trees, it is easy for us to believe that sixty per cent of Finland is covered with forests.

As we near Tammerfors, the factory city, we expect to see many tall chimneys and much smoke. But as the train pulls into the town we see that Tammerfors is much like a "garden city." While Manchester uses black coal, much of the manufacturing in Tammerfors is done with water power, which is called "white coal." Tammerfors is situated on both sides of great rapids which furnish abundant water power for its many factories. It also lies at the head of a lake system which extends for hundreds of miles through forested land. Though very small as compared with the famous Manchester, it is a modern, busy, thriving city. But the fragrance of the great pine forest still hangs over it and much of its life centers in the forests.

During the winter the woodmen fell the trees and haul the logs over the snow to the banks of the rivers and lakes. In the summer many logs are floated down the rivers and across the lakes to the mills at Tammerfors. There the great sawmills are kept busy. The pulp mills turn out large quantities of paper pulp for use in Finland and also for export. The paper mills make large quantities of paper. Tammerfors is the most important industrial city of Finland, but many other cities in Finland have developed power for use in similar factories.

Many of the forests around Tammerfors belong to the State, as it owns more than one-third of all the forest land of Finland. This is important, for as the timber is cut and sold it furnishes money for the government. The State ownership of forests is even more important in helping to insure a future timber supply. As the State controls large tracts of forests, it can prevent the destruction of the

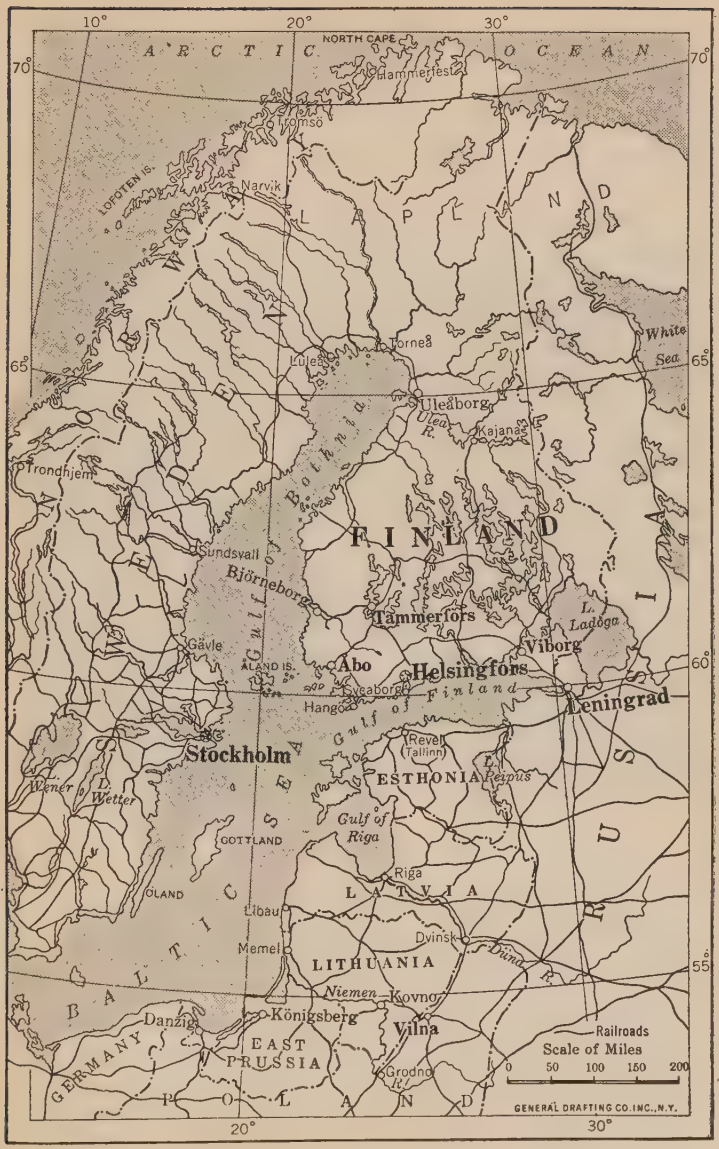
young trees. It can also establish a system of reforesting the land which will encourage the private owners to do the same. In this way it can maintain a future supply of raw products for its many factories.

The cheap power of Tammerfors has attracted many other industries to the city, for Finland has no coal mines. Like Manchester, Tammerfors has many textile mills. There are cotton, linen, and woolen mills which use raw materials imported from foreign countries. Of these, the cotton mills are the most important. There are other factories for manufacturing celluloid, felt, and dyes. The water power is also used to generate electricity for the town.

From Tammerfors, we might travel by boat on many small lakes and beautiful rivers and over thrilling rapids. The green trees, the peasants' small homes, the many birds in trees and marsh, the grazing cattle—all furnish interesting scenes on a trip which is limited only by the time of the traveler.

The products of the Tammerfors region are carried to the sea both by rail and by boats. Björneborg is the natural port of Tammerfors and is also a manufacturing center. Between Tammerfors and Björneborg lies some of the best cultivated land of the country, but in both of these modern cities timber "is king."

Instead of visiting this seaport, let us turn northward and travel by rail toward the center of Finland. The railroad ends at Kajana on the shore of a large lake, Lake Ulea. Although within two degrees of the Arctic Circle, we are here still in the midst of pine forests. We will leave the railroad and look for a boat to take us across Lake Ulea and down the river to Uleaborg, near the head of the Gulf of Bothnia. There are little steamers plying back and forth on the lake. There are also sailboats. We see still different boats of which we have caught glimpses


ARCTIC OCEAN
NORTH CAPE
Hammerfest
Tromsö
LOFOTEN IS.
Narvik
LAPLAND
Torneå
Luleå
White Sea
Uleåborg
Ulea R.
Kajanas
Trondhjem
Bothnia
FINLAND
Sundsvall
Björneborg
Tammerfors
L. Ladoga
Viborg
Gävle
ÅLAND IS.
Åbo
Helsingfors
Sycaborg
Hangö
Gulf of Finland
Leningrad
Stockholm
Revel (Tallinn)
ESTHONIA
L. Peipus
L. Wener
L. Wetter
Gulf of Riga
GOTTLAND
Riga
LATVIA
ÖLAND
Libau
Dvinsk
Memel
LITHUANIA
Düna R.
Niemen
Kovno
Danzig
Königsberg
Vilna
EAST PRUSSIA
GERMANY
Grodno
POLAND
RUSSIA
BALTIC SEA
Railroads
Scale of Miles
0 50 100 150 200
GENERAL DRAFTING CO. INC., N.Y.
10°
20°
30°
70°
65°
60°
55°

in other parts of Finland. These are long, narrow tar boats which seem to be hugging the water. They carry the product of another forest industry which will interest us.

The lonely forests are traversed by men who strip pieces of the bark from the pine trees. The resin oozes from the

Courtesy University of Helsingfors

FIG. 26. Finland. A tar boat going over the rapids.

wound and hardens there. After the trees have produced as much resin as possible, they are felled in the winter and hauled over the snow to the tar kilns on the river banks. There the trees are cut into yard lengths. These are put into a large saucer-like kiln, which is made of cement and which has a hole in the center. The wood is covered with turf and then set on fire. As it smoulders, the resin melts. The heat distills the tar from the resin and the tar

flows through the central hole into a barrel below. In this way the barrels are filled with tar during the winter months.

In their short summer these sturdy woodsmen, who have lived their hard and lonely winter life, take their barrels of tar to the port. They put about thirty tar barrels into the long, slender boat. Sometimes four men go with each boat, but frequently two men and their wives do the work. They sail across Lake Ulea, or, if the wind dies down, they row. Tar boats from other streams join them in this lake on their way to the port of Uleaborg. Once out of the lake, they travel down the river. Tar boats are seen on all the rivers within a distance of 250 miles from Uleaborg. They pass over dangerous rapids, some of which are several miles in length. Only careful piloting saves the boats from destruction against the jutting rocks. The waves dash over the sides as the boats shoot the rapids, often at a speed of thirty miles an hour. When the crews have landed their cargoes at the port, they start back home. In quiet water they row their boats, but when they reach the rapids three of the crew walk along the side of the stream dragging the boat by a tow-rope, while one stays in the boat to steer it away from the rocks. These hardy people try to make three of these long trips each summer. In winter they cut and transport logs, make the heavy barrels, and carry on the work at the kilns.

Tar and timber are also brought from near the Russian frontier over this same route. There, indeed, life is hard. The people raise few crops, and foodstuffs are sometimes very expensive, so that occasionally bark bread is used. The soft bark which is next to the wood is taken in the spring and dried. Then it is ground and mixed with flour and made into bread. This is used particularly in the northern part and along the Russian boundary where few cereals are raised.

Watching the tar boats, we reach the end of our journey at Uleaborg. That city is less than one degree from the Arctic Circle, but it is a bustling little town and has had electric lights for more than forty years. From its vicinity more tar is exported than from any other port except the Russian port of Archangel. At Uleaborg, too, the machines of the sawmills whiz and whir, and large piles of timber are seen. Along the river you see fishermen catching salmon. At the docks are bales of northern furs ready for export. Even this northern port helps to supply the world with what it needs.

Most of Finland resembles the parts seen on the trip and represented in the pictures. Have you wondered why Finland has so many marsh and meadow lands; why it has so many lakes and rapids; why dairying has become an important industry; and why it does not produce enough cereals for its own use? Let us answer some of those questions.

The Finns call their country Suomi, which means marsh land. You have read that Sweden has many marshes; the country along the southern side of the Baltic, also, has much marsh land. The reason is the same for all.

Great glaciers once passed over all of this region. They came from the mountains of the Scandinavian highlands and picked up, on their way, great bowlders and débris of many kinds. At the close of the Ice Age, when the glaciers melted, some of the débris was scattered over the land, and some was deposited in ridges which are called moraines. That which was scattered widely over the land often formed poor, rocky soil, not well suited to farming. The débris deposited in moraines often formed dams across the water courses. Thus many lakes were formed and other areas were made into meadow and marsh land. Many a river, meeting several of these moraines, was turned into a series of lakes and marshes, all tied together

by the remnant of the river. Where a river rose high enough to tumble over a moraine, rapids were formed.

This story of the glaciers of Finland explains, in part, the nature of the country and the occupations of the people. Finland is often called "the land of a thousand lakes"

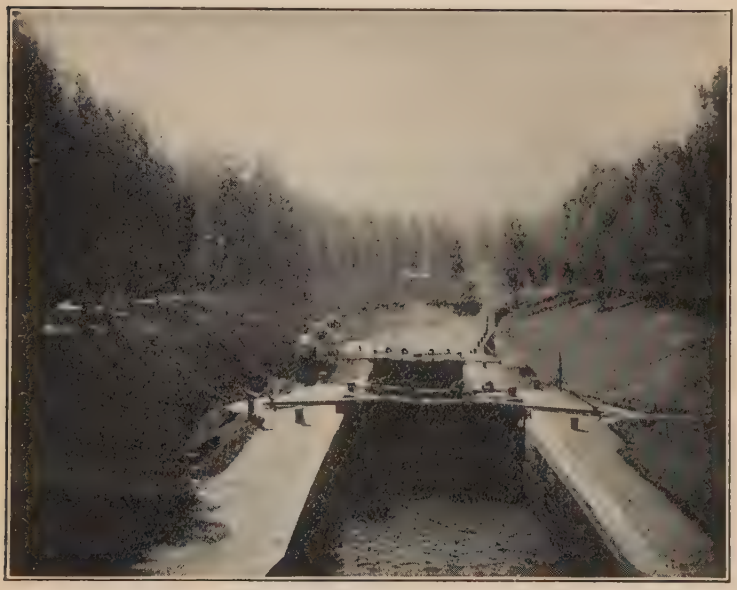


FIG. 27. Finland. The Saima Canal around Imatra Falls. Although Lake Saima, the largest lake in Finland, discharges its waters into Lake Ladoga, it is connected by this canal with the Gulf of Finland.

but it is really the land of 35,000 lakes. The many lakes act as reservoirs which help to keep the flow of water uniform during the entire year. How is that of value? The rivers, with their numerous rapids, furnish abundant water power. This abundant power is used to run the many mills which work up the products of the forests. It also furnishes the power for other industries.

The moist meadow land, like the lakes and marshes, is the result of glacial action. These meadows serve as grazing land for many dairy cows. Because of this, and also because much of the soil of Finland is too poor or too moist to be cultivated, dairying is an important agricultural industry. This is very fortunate, for more than

FIG. 28. Finland. A farm in the central part of the country. Note the material used in building houses, barns, etc. Why is this material used? What indications of prosperity do you see in this view?

one-half of the people make their living in farming in spite of the fact that less than ten per cent of the land is under cultivation.

Finland has never produced enough food for her own people. This is, in part, due to the small area under cultivation and to the fact that in many places the cultivated soil is thin and rocky. It is also due to the fact that Finland

is a country of the far north. All of it lies farther north than the main farming section of Sweden. How does its latitude compare with that of the British Isles and with your own latitude? Almost all of Finland lies north of the parallel of 60 degrees and so Finland has short summers and long winters; it has long summer days and long winter nights. During some years Finland's short summer produces only one-third of all the food that she uses.

How does Finland pay for the foods which she imports? She has no valuable metals to sell in payment. She has not yet reached the stage where she can import large quantities of raw materials and make money by selling manufactured articles. Therefore, she buys her foodstuffs by exporting wood, wood products, dairy products, and some other manufactured goods. Most of the money obtained from these exports she spends for food, raw materials used in her factories, coal, metals, and metal goods. Today Finland's chief wealth is in her forests and in her water power. With the products of that wealth she buys those things which she is not able to provide for herself.

Taken over by Germany – June 1940
Esthonia, Latvia, Lithuania part of Russia.

Chapter III

THREE BALTIC REPUBLICS

South of Finland, on the southeastern shore of the Baltic, lie three other new republics. These new states, which were formed out of a portion of the former Russian empire, are Esthonia, Latvia, and Lithuania.

Like Finland, these countries are of the north, with long, cold winters, and, like Finland, they were once covered with glaciers. The forests which we have seen growing in Norway, Sweden, and Finland also extend through these states and on into Poland and Russia. One-fourth of the area of Esthonia, Latvia, and Lithuania is still covered with forests. The pines and firs which cover such a large part of Finland rise in dark forests here also. The beautiful white birches which make such pretty pictures in Finland are found in Esthonia, although in smaller numbers. But hardwoods become more numerous as one travels from Finland southward.

As in Finland, the forests are the greatest natural resource of the region. The trees are felled and the logs are floated down the rivers to the ports of Revel, Riga, and Memel. Find each of those cities on your map and see in what country each is located. The logs are shipped from those cities to the more densely populated countries of Europe or are made into lumber at the ports. Revel, the main port of Esthonia, also exports wood pulp, paper, furniture, and matches; Latvia manufactures a few wooden articles which are exported from her port of Riga. Lithuania has hardly begun to export manufactured wooden

articles, but the Niemen River carries great quantities of logs down to her seaport, Memel.

Esthonia has been called the "Potato Republic." All the countries on the southern shores of the Baltic, but especially Esthonia, are large potato producers, for while the soil in many places is too poor for other crops it is

Courtesy Latvian Legation

FIG. 29. Latvia. What use is made of the Dvina River in this picture? What important product of Latvia is represented?

excellent for raising potatoes. Driving through Esthonia, you notice tall chimneys beside many of the manor houses. You never could guess why those chimneys are there. Each one of the manor houses has a distillery in which alcohol is made from the potatoes, and those chimneys belong to the distilleries. Much of the alcohol which is manufactured there is exported through Revel. The refuse from the potatoes is fed to the cattle. Potatoes are raised in such large quantities that in addition to those

used for food and for alcohol, some are exported to the markets of western Europe.

These three Baltic states lie in the great flax producing belt of the world. That belt extends all the way from France across the plain of northern Europe into Russia. At each of the ports of Revel, Riga, and Memel one sees great bales of flax fiber waiting to be shipped to Germany, Ireland, the United States, and other manufacturing areas.

Most of the people in these countries make their living by farming. In Esthonia and Lithuania about three-fourths of the people make their living by agriculture, while in Latvia only one-half are farmers. Many of the Latvians, instead of being farmers, live in Riga and work in the factories or carry on trade.

Traveling through these three Baltic states, one sees many flocks of sheep grazing on the drier land. In the rich meadows, one sees herds of dairy cows and cattle. Swine are also numerous, and in Lithuania are more important than either sheep or cattle.

What foodstuffs do you think those people need to raise besides potatoes? Certainly, they need grains for bread. As in some other parts of northern Europe, rye is the staple crop. Only a little wheat is raised, as neither the climate nor the soil is suited to its growth. Oats and barley are also important crops.

Throughout all of this Baltic region one sees many large estates. Each has its own large manor house. Somewhere near the manor house are barns for the animals, a distillery, and other farm buildings. At some distance are the small huts for the laborers. One notices that many of the manor houses are deserted. It is plain, too, that some of the large estates have lately been subdivided into small farms which are now being worked by the peasant owners. One wonders why so many of these large estates

Courtesy Latvian Legation

FIG. 30. Latvia. Threshing flax. In some parts of the country, modern machinery is used for threshing. For centuries flax has been an important product of this and neighboring countries. Why?

are deserted and why so many of the peasants seem to be newly settled on their pieces of land. The answer is a very long and interesting one and to understand it we must know something of the history of this region.

It is believed that even in prehistoric times the ancestors of these people lived along these Baltic shores. There

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FIG. 31. Lithuania. Notice how these peasants are harvesting grain. Lithuania is an agricultural country in which both men and women work in the fields.

were the Esths, who are closely related to the Finns and who have now established the republic of Esthonia. There were the Latts, or Letts, who have united under the Latvian government. And, finally, there were the Lithuanians, who are now struggling to maintain an independent state.

During the Middle Ages these early people secured their food by cultivating the soil, by fishing, and by raising

cattle and sheep. Their hives of bees furnished honey which was used very generally instead of sugar. The great forests furnished building material and wood for fuel. From their flax the women made cloth for their coarse summer clothing and from the wool heavy cloth for winter wear. The men went out hunting and trapping in the great forests. They secured furs for clothing and for trade, and meat for family use.

Courtesy Latvian Legation

FIG. 32. Latvia. A typical rural scene. What industries are suggested?

To the west of these people another primitive race was developing, the Teutonic race. These Teutons had many minerals which the eastern Baltic people did not have; they were also more closely in touch with the old civilizations of the Mediterranean. The Teutons were trading with the Mediterranean countries which in turn were trading with the Orient. Some of the goods were going from northern Europe over trails to Italy. Other goods

were carried around by sailing vessels or galleys. The Teutonic people were prospering for they had found that they could make good profit by buying goods in one place, transporting them, and selling them in another place.

In those days, wherever merchant ships were found, pirates lived on the plunder which they could take from the merchants. In order to protect themselves and to increase their trade, the Teutonic or north German towns formed a society called the Hanseatic League. The word "hansa" in their language means "association." Many towns all the way from London to Novgorod in Russia, were members of this league. The vessels of the Hanseatic League sailed to the ports which we now call Riga, Revel, and Memel, laden with metals, wheat, French wine, salt, coarse textiles, and sometimes a few luxuries from Venice, then the most important trading center on the Mediterranean. When the boats returned they carried flax, honey, wax, furs, skins, tallow, and forest products. As this trading went on year after year, Riga, Revel, and Memel grew, and they have continued to grow.

At the beginning of the thirteenth century, the Teutonic Knights settled on this coast. Through the Hanseatic League they had heard of these distant lands and several boat loads started out at one time to conquer and to christianize the so-called heathen. Can you picture these daring knights approaching the bleak Baltic shores? After conquering the natives, the Esthonians and Latvians, each knight took several thousand acres of land and established a large estate for himself. Many of the estates of the Teutonic Knights were situated on the coast near the mouths of the rivers. Goods from inland were brought over the lakes and rivers and by trails to the ports. There the goods were loaded onto the sea-going boats. The Teutonic Knights prospered and each of the towns became an active trading center. Each of these towns was sur-

rounded by a wall which protected the merchants during their stay on the mainland. There the merchants stored their goods until they sold them and were ready to return home. Bergen, Lübeck, Hamburg, Bremen, Cologne, Bruges, as well as Revel, Riga and many others, were

Courtesy Latvian Legation

FIG. 33. Latvia. A peasant's home. Why do men build houses with sloping roofs in northern lands? What about this roof seems strange to you? Most of the homes in this region are made of wooden materials. Why?

important Hanseatic towns. Lübeck, Hamburg, and Bremen are still called "Hanse" towns.

Many other knights came to this Baltic region later. Each built a large home and the natives became his serfs and did all the work. These estates were handed down from parents to children. In one way and another a large part of the land came to be owned by a very few people called the Baltic Barons.

In the beginning of the nineteenth century the Russian Czar granted the native serfs their freedom, but as they had no land they were forced to work for their former masters. Some of the land owners allowed these natives to use their spare time to clear, for themselves, small tracts in the forests and in unused areas. It generally took about fifty years for the natives to get their own land in this way. Not until then was each family able to educate its children and enjoy the benefits of its own work. And many families had not secured any land as their own. In 1913, the traveler through the Baltic provinces saw many well-cultivated country estates. In Esthonia and Latvia the estates were owned, mostly, by the Teutons or Germans, although many were owned by the Russians who had received large grants from the Russian crown. In Lithuania many of the large estates were owned by Poles who had secured the large tracts when Poland ruled that territory. In the ways described, the Germans, Russians, and Poles became owners of a large part of the land; most of the native people who belonged to different races were laborers under them.

When the Esths, Letts, and Lithuanians formed the three new republics, they wished to own the land themselves. The greatest problem which they had to meet was the division of the large estates into small farms in order that the people who had so long worked the land might own it. Laws were passed giving the government the right to subdivide the large estates and to give or sell the farm land to the peasants who cultivated it. Because of those laws many of the owners of the estates who had been driven away by the armies of the World War did not return; others left their manor houses when a part of their land was taken away from them.

Today a large part of the land in Esthonia formerly held in large estates has been made into small farms.

About one-half of the large estates in Latvia have been subdivided. Less progress in giving the land to the peasants has been made in Lithuania. You can now understand why the traveler in these countries sees so many deserted manor houses and why so many of the peasants seem to be settling in new homes.

In some ways Lithuania is unlike her Baltic neighbors. Finland has always been much like the Scandinavian

Courtesy Latvian Legation

FIG. 34. Latvia. At a cheese market. Tell the difference between this cheese market and the one in which you buy your cheese.

countries and found it quite easy to start on a journey of independence. Esthonia and Latvia have inherited all the old culture of the Hanseatic times. Lithuania has not been so fortunate. Although in the Middle Ages she was a great nation, other nationalities have been crowding upon her for many centuries. Now it is very difficult to draw a line between the Lithuanians and the other

nationalities and so establish even the boundary lines of the new states. That is one reason why Lithuania has not advanced rapidly as an independent state.

Lithuania differs from Esthonia and Latvia in another way. Nearly all of the Lithuanians are farmers, and the landscape is a series of quiet farms and small villages. In the other two states many of the natives are engaged in commerce, trade, and manufacturing industries. Lithuania has no important industrial cities. In its cities the trade is generally carried on by Jews, Poles, and Germans instead of by the Lithuanians themselves. The Niemen River tells the true story of Lithuania's industries, for on its surface float the products of the farms and forests. Heavy logs, barges loaded with timber, and boats carrying grain, flax, flaxseed, and naval stores, float down the Niemen to Memel, the port of Lithuania.

The two most important cities of this Baltic region are Revel and Riga. Revel is only four or five hours' ride by steamer from Helsingfors. In the days of the Russian Empire the Russian navy hovered along this lane guarding Petrograd, "the window of Russia."

Because of its excellent harbor, Revel has always been an important port. It was founded by the Danes, and its local name, Tallinn, means "city of the Danes." They sold it to the Teutonic Knights. Later it came under Swedish and then under Russian control. Now after seven centuries of foreign rule it is the capital of the Esthonian Republic.

The "upper town" in Revel with its crooked, cobblestone streets, reminds one of medieval days. There stand the Danish castle, the old cathedral with its German spires, and the Palace of the Teutonic Knights. Near by is the later Russian cathedral with its characteristic rounded dome. Each of these buildings speaks of a period of foreign rule. On this hill of the upper town the Baltic barons

lived. Their houses were thick-walled and deep-windowed. The plain exterior of the houses does not give the least suggestion of the beauty so often found inside those residences. In the "lower town," wider streets and modern improvements are seen. Stores, cotton mills, and furniture factories are located there.

The harbor of Revel is both large and deep and generally free from ice during the entire winter. It has many large

Photograph by Parikas

FIG. 35. Esthonia. The "old town" of Revel (Tallinn). Locate the fortress and the Russian cathedral.

docks with a place for berthing many ships. There are large stationary and floating cranes for unloading ships. Immense warehouses take care of the goods until they are shipped inland by rail. There are large grain elevators, where, in normal times, wheat from Russia is stored until it is exported. Repairs on vessels are made at three floating docks. A life-saving station, customs house, and oil cisterns add to the complete equipment. During the

summer the sailing vessels of the Yacht Club give an air of pleasure to this workaday port.

Revel is the nearest port to the Russian port of Leningrad, which is icebound during the winter. For that reason sixty per cent of Russia's Baltic exports go out through Revel in ordinary times. The exportation of raw products from Russia will always be a great part of the

Courtesy Latvian Legation

FIG. 36. Latvia. Part of the city and the water front of Riga, capital of Latvia. At another part of the water front you would see the work of a busy port.

export trade of Revel, which is directly connected by rail with Leningrad, Moscow, and also Riga in Latvia. At Revel one sees ships from the United States, Germany, England, France, Denmark, Sweden, and Finland. This foreign trade is carried on by Esthonian, Finnish, English, Swedish, Danish, and German firms while native firms handle the local trade.

Riga is larger and more important than Revel. Riga, too, has its old town with its crooked streets and Teutonic spires. There one sees the old House of the Black Heads.

In the Middle Ages it was a club of foreign merchants, but later it changed to a social club and many famous visitors have signed their names in its golden register. Near by is a medieval castle. The old town is very much as it was in the days of the Hanseatic League, with its narrow streets and high warehouses built by the old Bremen merchants.

Most of Riga is of recent date. Before the war it was a "real city" of more than a half million people. In the new part of the town there were many machine shops, breweries, distilleries, sawmills, oil mills, a large rubber factory, and many metal industries. There were theaters, parks, and beautiful boulevards, and it looked like a modern West-European city. There were several beautiful suburbs in which the wealthy people lived.

Today, the city seems only a shell of its former self. The buildings are still standing, but many of the people left their homes as refugees during the World War and have never been able to return. Many of the houses are vacant, many of the factories are stripped of their machinery, and much of the business is at a standstill. Refugees are returning from all parts of Russia, but it will take many years for Riga to return to her old prosperity.

The Latvian peasants are very hard working and pious. They often repeat the phrase, "Pray to God and work." Possibly it is this saying which makes the Latvian workers known the world over. It is because of these excellent workmen that the city of Riga was an important factory center. Before the war, one-fourth of all the metal industry of the Russian Empire was centered in the two Latvian cities of Riga and Libau.

Riga is situated at the mouth of the Düna River and on that river logs, rafts, barges, and small boats find their way to tidewater. Railroads also bring the products of the country to the port, and during the time of the

Russian Empire this city was the second Baltic port of Russia.

If you look at the picture of the old-town bridge you will notice that there are three signs posted instead of one. One is printed in Latvian, one in German, and one in Russian. All of these languages are heard on the streets and if you were to go to see a moving picture you would find

FIG. 37. Latvia. This bridge joins Old Riga and New Riga. The three notices on the bridge are each in a different language. Why is this necessary?

three languages thrown on the screen. Most of the Latvians who live in the city speak German and Russian as well as their own language, for they realize that foreigners cannot take time to learn a language which is spoken by only two million people. Today Latvians are studying very hard to learn the English language.

As we have seen, the most important resources of these three Baltic States lie in their forests, rivers, and soil. They have no iron of their own to be made into machinery

and no other metals to be manufactured. They have no coal to furnish power, but from their forests wood for fuel may be obtained and from their rivers water power can be developed.

The three Baltic republics resemble each other in their natural resources, size, their position between the Baltic and Russia, and in their lack of experience in matters of government. They differ, each from the other, in race and language. Which of these resemblances or differences will help them to become strong states? Which will hinder? Why?

Since 19:4, Germany under rule of Chancellor Hitler – a Nazi "regime".
1940 - Battle of Flanders. Leopold III surrendered May 26 - his army. Germany fighting way to English Channel.
June 22, 1941, Germany declared war on Russia.

CHAPTER IV

GERMAN-SPEAKING COUNTRIES

GERMANY

DID you visit the stores to see the toys just before last Christmas? If you did, you probably saw many toys which were imported, for the United States buys toys in England and France and even a greater number in Germany.

There were many kinds of German toys which you could have seen in the stores. First, there were many mechanical toys. Did you see the steel steam-engines, some of which were two feet high and made so perfectly that they would really work? A steam engine would be of little value unless there were some machinery to run. So there were steam-shovels and cranes. Then there were German-made railroad tracks and trains and also railroad signals. There were mechanical boats of almost any size a child's heart might wish. Windmills, moving-picture machines, and garages equipped with automobiles, all seemed to attract the attention of the boys.

There were German toys for the girls, too. There were beautifully made doll-houses, each room carefully furnished. There were many kinds of dolls although there were not as many German dolls as one saw formerly. And there was a whole menagerie of stuffed animals—bears, elephants, lions, tigers, camels, and many others. There were rocking-horses with real hair, tumbling monkeys, and expert trapeze performers. There were several hundred kinds of toys all made in Germany; there seemed

© *Underwood and Underwood*

FIG. 38. Germany. Selling toys on the streets of Berlin.

to be everything from a cheap top and tin cars to the expensive steam engines and lifelike stuffed animals.

Did you examine the Christmas tree trimmings and notice the outside of the boxes? If you did, you noticed that many of the boxes were labeled "Made in Germany." Many of the sheets of tinsel and other metallic trimming had the same label. Think of the very long trip those fragile ornaments had to make; first, probably on a river barge to a German port; then, on a large steamer to one of our ports; and finally, a railroad trip to your home town. In spite of that long journey, many of the ornaments could be bought for a few cents apiece.

Would you like to visit a toy-making center of Germany? Toys are now made in many parts, but let us visit central and southern Germany, which is its real toyland. Our first stop will not be in a city or even in a village, but in the homes of Thuringia in central Germany. Here the mountains are covered with fir and pine which furnish the wood for the toys. See that tiny little house nestled against the side of the mountain! It looks as if it might tumble into the foaming mountain torrent. In that house the whole family spends its time making little wooden horses. The older boy cuts out the body; the younger children work on the legs; the nimble fingers of the mother carve the mane, tail, and face; the father and grandfather put the different parts together with tiny wooden pegs or fine wire; the grandmother finishes the horses by painting them. The grandmother and grandfather have been making horses ever since they were children. Each family in the valley makes a different toy and has been making the same kind year after year.

If you stop in the town of Thuringia, especially on Saturday, you may see women and girls coming into town. They are carrying large baskets strapped to their backs. These baskets are filled with toys and Christmas tree

trimmings which have been made by the family during the week. Sometimes only parts of toys are made in homes. These are then taken to factories where the toys are finished and boxed for shipment. There are china toys, metal toys, wood and even paper toys.

In the southern part of Thuringia is the town of Waltershausen, the "doll-land" of Germany. Here you see many doll factories, but some of the work is still done at home. In the homes, women and girls are making doll bodies and clothes, and boys are stuffing the bodies. The heads are made in the factories. The pretty yellow wigs are generally made of the wool of the angora goat, while the wigs for their dark-complexioned sisters are often real hair.

As you travel farther south you reach a sandy, pine-covered plain surrounded by hills. Here is located the city of Nürnberg, which may be called the capital of toy-land. Centuries ago there was a saying that "Nürnberg's hand goes through every land." That was true before America was discovered and it is still true today.

Let us see why that was said. During the Middle Ages, traders from the middle Danube trudged, or drove their slow teams through the lowland to Nürnberg on their way to the middle Rhine. Others went their slow way from the Mediterranean trade centers, through Nürnberg to the Hanseatic cities at the north. For a night or more these traders found safety behind the protecting walls of the city. In Nürnberg, too, they bought goods that had been made in that city and in the region round about. Merchant princes and peddlers from Nürnberg sometimes joined the other traders on their dangerous journeys, and Nürnberg became one of the important trade centers.

During those days the workers in each art, as stone-cutting or working in iron, were organized into a society called a guild. Anyone wishing to join one of these guilds

had to serve an apprenticeship for a number of years. After he had served his apprenticeship he was often sent to other countries for further study. When he returned, he had to make some masterpiece in order to become a teacher in that trade. Many of these masterpieces took years to complete; often they were made for the churches, so today the churches are filled with wonderful old carvings, rare paintings, and exquisite ironwork.

Not only did the old masters make beautiful ornaments for the churches; they also spent much of their time in beautifying the city. They built public fountains in the market places and each masterworker tried to outdo all the others. Many of these fountains have been restored and may be seen today in the market places of Nürnberg.

There are two old statues in Nürnberg which children enjoy more than any others. One is a statue of a bagpiper. The other is that of a peasant boy with a goose under each arm. This peasant boy is supposed to have come to Nürnberg with no wealth except the two geese. By his industry and skill, he was able to make a fortune. As you travel through southern Germany you see hundreds of geese carefully tended by the goose-herds or by the goose-girls. So you are not surprised when you see this interesting statue.

Nürnberg was also noted for its many inventions. The famous "Nürnberg eggs" were invented there, but they were really watches instead of eggs.

Today the old castle-fortress on its rocky hill still looks down upon the crooked, narrow streets of the old town of Nürnberg. The red-tiled wooden passage on top of the old wall is an excellent view-point. From there one can look down upon the river, winding its way under the picturesque covered bridges and between the old houses. One can see the palaces of the old merchant princes and the two old churches built by the skill and wealth of those

days when Nürnberg was filled with masters in every craft. Looking downward in the other direction one sees where the old moat once encircled the walls. Today, it is filled with flowers and shrubbery and happy playgrounds. Beyond lie the busy factories of the modern city where Nürnberg keeps up its age-old reputation that "Nürnberg's hand goes through every land."

Today Nürnberg is one of the most important centers of trade in Germany. It lies on the main railroad line from Vienna on the middle Danube, to Mainz on the middle Rhine. Through trains from Constantinople, Budapest, and Vienna pass through Nürnberg on their way to Ostend and Rotterdam. Trains from Innsbruck, in Austria, pass through Munich to Nürnberg. And many other railroad lines lead to this important center. The old wagon roads through Nürnberg have been replaced by modern roads.

Canals have been built so that Nürnberg is joined by water routes with many parts of Germany. Its railroads, roads, and canals help to make Nürnberg a modern trade center.

Nürnberg is today not only a center for trade; it is also a manufacturing center. If you were to enter Nürnberg by train your first impression of the city would be one of great disappointment. You would be hoping for a glimpse of its quaint old streets, of its high gabled houses, and of the remnants of the protecting walls. Instead you would see hundreds of ugly modern factories. There are factories which make glass, chemicals, and other articles. But the buildings which most interest us are the ones which have something to do with toys. There are buildings where toys made in the villages in the surrounding country are collected; there are others where parts are assembled and the toys completed; in others, toys are made. Almost all of our imported mechanical and metal toys such as soldiers, boats, steam engines, and railroad trains come from there. To Nürnberg the buyers from the United States, England, and many other countries come to buy many of their toys. Do you not think that Nürnberg would be an excellent place for Santa Claus to make his home?

While in southern Germany you might wish to visit Munich, another medieval city. On your way to that city you would pass many thinly wooded tracts. In the summer, you would see fields of barley, for in this region most of the soil is poor and other cereals do not thrive well. Munich lies a few miles north of the foothills of the Alps and in the early days it, too, was at the crossroads of routes of trade. Traders traveling east and west skirted around the foothills and passed through Munich. Traders from the north and south, using the Brenner Pass through the Alps, stopped at Munich. And here, as at Nürnberg,

the old traders found safety behind the city wall with its protecting towers.

Today you will see little in Munich to remind you of those days, for most of the present city has been built within the last one hundred years. However, it is still

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FIG. 39. Germany. Many of the cattle in Bavaria are taken to the high pastures in the Alps for the summer. Why? In the fall, the herdsmen decorate the cows and bring them back to the lower country.

the crossroad for important routes. The most direct route from Paris to Vienna and the railroad line from Berlin to Rome, both pass through Munich. Which of these two lines also passes through Nürnberg?

Munich is situated on a river which furnishes water power to run different kinds of factories, but her most important industry is brewing. The large quantities of

barley produced in the region have made Munich the most important brewing center in Germany. In the suburbs are many celebrated beer gardens.

But it is not trade or industry which makes Munich most attractive. Instead, it is the importance of the city as a center of the arts and sciences. Munich is the capital of Bavaria and for many years was the home of its king. One king was much interested in the fine arts and developed those; his son had his greatest interest in science and fostered that. In this beautiful city there are great art collections which rival those in Berlin and Dresden and which attract many visitors. Many of the collections of pictures and sculptures are world famous. Munich is also a well-known musical center and many go there in the summer time to enjoy the annual festival of Wagner and Mozart music. Besides all of the attractions in art, Munich is the home of several scientific and geographical societies. We are not surprised that Munich, with its beautiful buildings, its art galleries, its musical centers, and its scientific societies, is one of the German cities which most Americans wish to visit.

West of Munich, between it and the Rhine River, lie many forested plateaus. But of all the beautiful mountain regions in Germany the Black Forest, east of the Rhine River, is the most famous. Would you like to follow some of the German boys and girls who, with light knapsacks on their backs, tramp through this wonderful region?

You start on the lower slopes, in the midst of beautiful vineyards, and begin your walk up a broad valley. What wonderful roads! They are well paved and the grass is carefully trimmed along each side. The stream which flows beside the road is making merry music; the nightingales are singing their prettiest songs; the wild flowers seem to be trying to out-do each other with their bright colors; and the slow tinkling of the cowbells tells you that

the cows are quietly grazing. Above you tower the tree-crowned peaks. You pass a road-mender going over this

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FIG. 40. Germany. A rural scene in the Black Forest.

section of the road, repairing each little break. The road winds around and around among the forest-rimmed valleys.

Soon you approach a farmhouse which is almost black with age. In front of the house is the age-old fountain bubbling with the crystal water of the forest. Near by are old trees under which several generations of people have sat. Some of the trees are beautiful old shade trees; others are cherry trees which bear a crop of cherries from which brandy is distilled. How attractive the scene is! You wonder why the house seems so large. Upon inquiring, you find that it is both house and barn. The same wide projecting straw roof protects both the family and the cattle from the wet and cold. Some of the farmhouses have new tile roofs but this one is proud to have, still, its old thatched covering. Do you imagine this house was built by the people now living in it? It was built by their ancestors many years ago. The wood for building it was cut here in the neighborhood and all of the repairs have been made with wood from the same region. The living quarters for the family are separated from those for the cattle by a narrow passage. Above the living room are other rooms for the servants, for this is one of the larger homes of the Black Forest. The furnishings inside are very simple indeed. In the corner of the living room is the large green tile stove. There are frames near the stove for drying the clothes. Around the stove are tile benches on which the different members of the family sit and work during the long winter evenings. Possibly the children, too, are glad to sit there when they come in from the snow with cold, damp feet. There is a table and some wooden chairs with high carved backs. Those are the same chairs on which the parents sat, yes, the grandparents and possibly the great-grandparents. Even the corner called the "Lord's Corner" is kept unchanged. Here is a crucifix decorated with a few flowers, or, in winter time, with small twigs of fir. There is one thing you must not fail to see. It is the wooden clock which

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FIG. 41. Germany. Homes in the Black Forest. How are these Black Forest homes like the homes in Switzerland and Austria? Why are they so much alike?

hangs on the wall. This clock was made here in the Black Forest and nearly every home in the region has a clock of this kind. Some of them are handed down from father to son with the home. Although this is a very beautiful part of Germany, it is not a rich part and all of the people live simply.

The Black Forest has long been known for its home industries. It was once famous for toys, music-boxes, and cuckoo clocks which were made in the homes. In those fairly recent days, as now, wood was the most plentiful material. During the cold snowy winters there was little for most of the family to do outside, so many of the family worked at carving wood. Some of this work is still done in the homes, but most of it is now done in small factories which have grown up in the midst of the Black Forest. Some of the same people are doing the work, but many of them go to the factories each day to do it. Toy-making is still so important in the Black Forest that the city of Freiburg has an exhibition of toys annually.

If you could understand German, the old grandmother would be glad to tell you stories of the days when the home industries were important. She would recount stories of the middle of the eighteenth century when the peddlers' trade was a very important one. Those were prosperous days for the people of the Black Forest. Then they began weaving straw braid and making hats and baskets to send to other lands by the peddlers. This industry has come down to the present time although they do not make enough hats for themselves.

The old grandmother might also tell you the story of clock-making, which is today one of the most important industries of the region. About three hundred years ago traders from other parts of southern Germany introduced wooden clocks. Since, like most mountain folks, the people of the Black Forest were skilled carvers, it was

very easy for them to imitate these new wheeled clocks. By 1800, many hundred master clock-makers were at work and many improvements were made. Even the metal parts were manufactured in native foundries. Soon many kinds of automatic clocks were made. On some of the clocks a monk came out to ring the hours; on others a sentry appeared and marched up and down; sometimes all the twelve apostles appeared. Of all these, the cuckoo clock has always been the most famous and most typical of the Black Forest. Today these clocks are made in factories, although in some homes one still finds the people carefully carving the cases. Watches, too, are made in factories in some of the Black Forest towns.

We must not linger to hear the stories of the grandmother any longer. Many interesting sights lie ahead. We have hardly rounded the corner before we hear the buzz of a sawmill. Here, too, we learn many interesting things. Away back in the days of the Romans this area was a famous lumbering region. Here were some of the outposts of the Roman Empire and here the Romans built famous baths at some of the mineral springs. Could you visit some of the remains of these old Roman baths, you might see monuments on which are shown the raft-floating of those days. And so you know that lumbering has been the main industry in this region for 2000 years. In the Middle Ages, also, lumber rafts were floated down the many streams. Today the men are still wood-cutters, but the methods have changed. Now all of this region is like one large, beautiful park and great care is taken that no damage is done. The trunks of the trees are now generally dragged down steep wooden runs to the valley. Woodmen can no longer let stray logs be carried off by the river. The banks are all cultivated and the farmer cannot afford to have descending logs tear away pieces of his valuable land. Then, too, many of the logs now come

from places which are not near a stream. Do you wonder how it is that there are any trees left in this region? Of course the valleys in which the trees could be cut easily were stripped of timber some time ago and are now divided up into small farm tracts. The cutting of timber in all the forests of Germany is now controlled by the government. Each year the forest keepers see that only an amount equal to the year's growth is cut. If these laws are always obeyed, the Black Forest will always have as much timber as it now has. Then wood-cutting can continue to be an important industry of the region.

You must leave the sawmill behind, for you wish to reach a mountain village before nightfall. There you find a neat little inn and are only too glad to have a simple supper and retire for the night. There are many days' journeys ahead if you wish to get into the heart of the Black Forest. Each morning you start out with new enjoyment. You pass a crossroads with its wayside shrine. From a high point you look back into a valley. Its tiny farms, each only a few acres in size, look like pieces of patchwork. There are no fences or hedges, for each foot of land must be cultivated. Only a few of the farms are large enough to use modern machinery. At times one hears the regular beat of the flail on the threshing floor. This threshing floor may be above the living rooms. It can often be entered from the side of the hill against which the house seems to lean.

You hear the whistle of a train! In the distance you see the coaches going around the curves of the mountains. An automobile drives past you. Still you know that your way of seeing the Black Forest is the best.

On one of the slopes you see a nursery of young pines and firs. This is one way in which the government keeps up the supply of trees. These trees will some day be set out on slopes which are too steep and rocky to be used for

anything else. As you pass the woods you notice that there is no underbrush. All of the underbrush has been taken out in order to prevent the spread of fires. And all fallen twigs and branches have been carefully collected for the same reason and also because they are valuable as firewood. In the midst of some of the most beautiful wood scenes you see ruins of old abbeys.

As you leave the road you can follow a well-kept trail through the entire length of the Black Forest. It winds through wooded valleys, around forested curves and on the tops of ridges. At each turn it is carefully marked so that you cannot lose your way. You look down on silvery lakes which mirror the surrounding trees.

In some of the Black Forest valleys you can still see some of the ancient costumes at church time. Then the women and girls go to church dressed in the quaint style of former years. Their white woolen stockings have been knit most carefully. They wear short black plaited skirts, embroidered bodices, and white waists with puffed sleeves. On their heads they wear white straw hats trimmed with black or red woolen balls. Some of them wear the well-known aprons of heavy, shiny silk. The men, too, have kept the old costumes. They wear black velvet knee breeches, white stockings and buckled shoes, a red vest, and a black, red-lined coat reaching to the knees. They usually wear low black felt hats instead of the straw hats. Have you noticed how people who live in mountains keep their old dress and other customs longer than the people who live on the plains? Can you explain why this is true?

In the winter time the Black Forest is covered with snow. The dark pines and firs which have given this region its name are then draped in white. Then many a merry skiing party starts out from the city of Freiburg for the flat bare slopes and valleys of the Feldberg Mountain. It is only in recent years that skis have been used in this region.

At first the people of the Black Forest did not welcome the visitors who interrupted their winter solitude. Then they, too, began the use of the skis and local factories began to manufacture them. Now the people of the region are no longer lookers-on. Today everyone in the Black

FIG. 42. Germany. At home in the Black Forest. This couple is sitting in the warm corner beside the tile stove. Notice the typical Black Forest clock.

Forest travels on skis in the winter. At the schoolhouse small and large skis stand side by side waiting to take the children back to the farms in the woods. On the narrow woodland path the postman and telegraph messenger make good time on their skis and are in practice for the annual ski race. Late in the evening the priest hastens past you on skis to go to some dying man in a house high up on the

edge of the forest. On Sunday you see thousands of skiers coming from Freiburg by train to enjoy the Feldberg. Many become very expert here and then are ready to go to the higher and more difficult mountains in the Alps.

After reading about the Black Forest do you wonder that it is one of the favorite vacation resorts of the German people? There are also other well-known mountain resorts in Germany. Were you to visit the Hartz Mountains in north central Germany, you would find what would seem to you to be the land of canary birds. As you entered a home you would find many bird cages. Some would be filled with beautiful songsters. In some the mother birds would be sitting on the nests or feeding the young. In other cages you would see young birds just making their first attempt to sing. How carefully the owners listen to the singing, for if the bird turns out to be a songster it will sell for a good price. These country and village women raise the birds to sell in the cities. Many of them are sent to us in the United States.

Germany has many other beautiful mountain regions besides the Black Forest. But none of them are so full of fairy legends, tales of goblins, and other folklore as the beautiful Black Forest, which the Germans call the Schwarzwald.

West of the Black Forest is another one of the most famous regions in Europe, the Rhine Valley. The Rhine River is the busiest river in all Europe. It rises in Switzerland near the famous St. Gothard Pass. After tumbling down between rocky walls, flowing through Lake Constance and over great falls, it turns northward near Basle and flows between France and Germany. On this northward journey it is flowing toward its final goal, the North Sea.

North of Basle the Rhine first flows through a flat valley about twenty miles wide. Toward the east rise the

mountain peaks of the Black Forest; toward the west lie the wooded heights of the Vosges Mountains. On many projecting points, one sees the ruins of old fortresses half hidden by the trees. These fortresses were the homes of the robber-knights of the Middle Ages. From these strongholds they descended upon the merchants traveling through this valley. And many merchants traveled through this valley, for it was one of the main routes for centuries between Italy and the countries of the North Sea. So there the robber-knights grew rich and there they built their strong castles.

On the lower slopes of the mountains one sees well-cultivated vineyards. At the foot of the mountains rises an occasional town in the midst of fertile fields. Still nearer the river one sometimes sees damp meadow land, and along the shores are trees growing in the coarse sand.

As we travel down the river we see the busy city of Strasbourg, located a few miles to the west on a tributary to the Rhine. At the mouth of the tributary we see many barges. You wonder why there are so many at this point. If you look at your map you will find that a lowland joins the Rhine Valley to the Saône, an important tributary of the Rhone. A canal has been dug between the Rhone and the Rhine valleys, called the Rhone-Rhine Canal. Today many barges travel between the Rhine and the Rhone rivers. Some of them stop at Strasbourg. If you will study a map again you will see that Strasbourg is joined to the Marne Valley by another lowland. Here the Marne-Rhine Canal has been dug so that barges from both the Rhine and the Rhone valleys pass Strasbourg on their way toward Paris via the Marne-Rhine Canal.

Strasbourg, then, is situated at the point which joins the busy Rhone and Rhine valleys to the busy Marne. It is because of its important position that Strasbourg has long been coveted by both France and Germany.

Let us board a fishing boat at Strasbourg and then journey on slowly down the Rhine River. The banks are fringed with long rows of slender poplars and bushy alders. Soon we pass the Rhine harbor of the busy city of Karlsruhe. A little later we stop to watch the salmon fishers. We watch them put a live salmon on the hook and drop it overboard. After a time the salmon begins to pull at the line. This is a sign to the fishermen that other salmon are approaching and the great nets are lowered and are soon brought up with the catch.

At the junction of the Neckar River with the Rhine we see the city of Mannheim. Although it is far from the sea and although it is a harbor without masts, it is one of the great ports of Europe. Its trade is twice the ocean traffic of the port of Bremen. Here we see long strings of barges, called barge-trains, being towed up the river. At Mannheim, the barges are unloading cereals, coal, petroleum, timber, metals, and other raw products. Some of those products will be used in the many factories of Mannheim. Others will be shipped to other points in southern Germany, for Mannheim is the head of navigation for the large barges, and goods are brought to this port to be shipped into France, Southern Germany, and Austria. Below Mannheim the river becomes busier and busier with each mile.

Now our journey carries us between closely cultivated fields. There are acres of sugar beets and cereals. There are beautiful orchards of fruit trees and sometimes a field of tobacco. At Mainz we leave the fishing boat, which is towed back up the stream. We board one of the small steamers and soon leave "Golden Mainz," another busy city, behind us.

Now one beautiful picture after another is unrolled before us. The mountains rise above us; small valleys reach the river's edge; villages cluster along the shore:

churches nestle in the midst of greenery; cities are busy with many industries. We pass flourishing vineyards and fields of grain. One well-cultivated tract reaches to the next one. Homelike country houses are mirrored in the waters. The whole scene looks almost like a single scattered city standing out against the vine-clad hillsides and the forested slopes.

Bingen is in the midst of the grape country. The vineyards receive the greatest care. In the winter time much of the old and the immature wood is trimmed off. In the spring the trellises are repaired, the vines are tied up, and the ground is cultivated and fertilized. All during the summer the ground must be kept well cultivated in order to save the moisture.

This region is especially suited to grapes. Many of the southern slopes which face toward the warm sun and away from the cold north winds are covered with vineyards. The river aids, too, for it reflects the sun's heat back upon the hillsides.

In spite of the hard work and uncertain crop, the grape growers are generally merry folks. At the harvest time there is a great festival throughout all the Rhine province. The day for the harvest and festival is chosen by the head of the community and is usually in the latter part of October. The day is opened with the firing of small cannons and the ringing of bells. Everyone helps gather the crop; no one seems to be either too old or too young. All are happy at the thought of the harvest. After sunset, the cannons are again fired and the bells rung, and these are signals that everyone is to stop work. Then the workers gather in a happy procession. Each one carries a paper lantern or a torch and they all march home. You hear their voices singing the old Rhine songs. Some who are not too tired go to the taverns along the Rhine to drink some of the new, sweet grape-juice.

© *Ewing Galloway*

FIG. 43. Germany. The Rhine River below Bingen. The shacks on the rafts are the homes of the lumbermen as the logs are towed slowly downstream. This region is famous for its vineyards which cover the lower slopes. Forests occupy the higher slopes.

Below Bingen the river narrows and flows between steep, vine-clad banks. It flows more swiftly, too, and the pilot carefully guides the boat away from the dangerous rocks. On the heights above and on islands in the river itself, are ruins of old castles. Each has its own legend. Many of them were the homes of robber-knights, where princes collected toll in medieval days. We pass a bare rock, the "Lorelei." Its tall summit gleams in the bright sunshine above the dark shadows of the river. Both singers and poets have sung of its beauty. The most famous legend of the Lorelei tells us that a beautiful woman once lived there and that her songs charmed the sailors to the rock only to destroy them. Certain it is that many a vessel in charge of careless fishermen has been wrecked upon its rocks.

We have seen no railroad bridge across the Rhine since we left the city of Mainz. Ahead of us we now see another railroad bridge and we reach the thriving city of Coblenz. Coblenz is situated at the junction of the Moselle and Rhine rivers, and, like so many other cities along the Rhine, is built on the site of an old Roman fortress. Can you explain why the Romans built a fortress at this particular point?

The junction of the Moselle and the Rhine is also an important site in modern times and Coblenz is an important city. The Saar Valley, a small valley which opens into the Moselle, furnished nine per cent of the German coal before the World War. Now those mines are owned and worked by France and continue to furnish a large amount of coal. The Moselle Valley contains large iron mines. These coal and iron mines have helped to develop many industries in the region and both raw and manufactured products are shipped via the Rhine River.

Below Coblenz the Rhine River again flows in a narrow valley to Bonn, where the valley widens into a plain.

Soon we reach Cologne, the chief city of the Rhine. Although Cologne is located two hundred miles from the sea, small ocean liners reach its quays. Cologne was an early Roman city. In later days it became a member of the Hanseatic League, and goods from Italy and the Indies were brought there to be distributed over the near-by plain. Its many weavers made goods to be exchanged for foreign wares. In the fourteenth and fifteenth centuries Cologne was one of the chief cities of Europe. Its encircling wall, its heavy towers, and its defiant gateways protected its rich merchants. Its beautiful cathedral, its many-towered churches, its ancient palaces and its steep gabled houses all remind us of those old days of splendor. Cologne is still the center of the Rhine province, now famous for its many industries. Modern buildings and modern industries overshadow much of its past greatness.

Our journey has taken us past the great city of Düsseldorf and now brought us into what may be called the great workshop of Germany. Instead of the one route along the river, there are now a thousand paths crossing the plain. The steep banks of the river have now spread out into an open country; low bushes and tall poplars line the shores. Here cities have grown up where but a few years ago agriculture was the main industry. Here great warehouses alternate with meadows where cattle are grazing. In these cities the dyers and the weavers are at work; the chemists are carefully searching out new ways of making drugs, dyes, and other chemicals; the glass makers are working at full speed; the tanners are turning out leather; and the paper mills are busy making news-print. But here, most of all, iron and steel goods are manufactured in great quantities.

Can you tell why this region has become the greatest workshop in Germany? If you will look at your map you will find a small river, the Ruhr, entering the Rhine

from the east. This Ruhr Valley has many coal mines which extend over an area ten miles broad and for forty miles east of the mouth of the Ruhr River. These mines can furnish 100,000,000 tons of coal each year. This coal supplies the power for the hundreds of factories in the Ruhr Valley. The same region has mines of iron ore also. This area is almost a continuous line of mines, towns, and factories. A dozen cities of more than 100,000 people have sprung up. There is Essen, once famous for the Krupp guns and now making bridges, engines, tools, and farm implements; Crefeld, known for its silk and velvet industries; Barmen and Elberfeld, which extend for six miles along a small river and manufacture all sorts of textiles and many chemicals; Solingen, the chief center for German cutlery and famous since the Middle Ages for its steel; Dortmund, a great smelting center; Duisburg, a great river port with five miles of wharves, ships large quantities of coal both up and down the river, and receives timber from the upper Rhine and corn from foreign countries. There are many other cities in this same region which are almost as important as the ones mentioned, but there are too many to name them all. Sometimes between these new towns one sees a small medieval city with its old wall and little church. The Ruhr Valley looks more like one great city than like several. In all this region the factory whistles are screeching; the tall chimneys are belching forth smoke which often hangs like a cloud over the valley; the coal cars are raised from the shafts and dump their loads into the waiting train; even the river is colored with the refuse of the factories; and there is noise everywhere. All seems to be commotion and still everything is done regularly and in order. The cities are so close together that in this area there are about 3000 people to the square mile. Can you tell why Duisburg imports corn and other cereals from foreign countries?

Although the Ruhr Valley has iron ore, some of the iron used there before the World War was mined in the Moselle Valley near the city of Metz. The region around Metz, called Lorraine, is now a part of France. How do you think the industries of the Ruhr will be affected by the fact that France now owns the iron mines in the Moselle Valley?

After leaving this great workshop of Germany, the Rhine flows quietly on between broad fields. Steamers and barges carry raw materials and manufactured products in large quantities. Soon the Rhine reaches the border of Holland. It then becomes a great Dutch river serving the people of Holland as it has served the Germans for many, many years. As you read about Rotterdam you will read more about the freight which travels on the Rhine River.

As you have read about Germany thus far you have learned something about the home industries which have existed in all parts of Germany for centuries. You also have read of the mushroom growth of modern factory cities in the Ruhr Valley. Let us now see how it was that Germany, in a half century before the World War, developed into the greatest industrial nation on the continent of Europe.

Coal is the fuel which runs most factories today. Germany had her own coal. During the time that Germany was making her rapid strides in industry, she had several large coal fields. The most important one is the one in the Ruhr basin of which you have read. A portion of her coal supply came from the near-by region of the Saar basin. There was a second large coal field in southeastern Germany, but a portion of that field is now owned by Poland. Germany's only other large field was west of the city of Chemnitz. These rich coal fields supplied abundant coal for her own many factories and also left

some to sell to other countries. To this fuel supply was added the electrical power which was developed in the mountains of southern and central Germany, so that Germany had an abundance of power.

German mines also furnished many raw products for her factories. There were large iron mines in Lorraine and smaller ones in other parts. The Lorraine iron is now in French territory. Germany also had some of the richest zinc mines in the world, but the best ones are in the territory given to Poland. She also had gold, silver, lead, and copper, and bought large quantities of copper from the United States. She had excellent materials for making glass and many good clays for porcelain and earthenware.

The farms furnished other raw products for the factories. Germany is one of the most important sugar beet regions in the world. Her factories refined enough sugar to supply her own needs and also some for export. Her fields produced potatoes for manufacture into starch and alcohol. She raised some flax and hemp and imported large supplies of flax from Russia for her linen factories. The sheep produced excellent wool for her woolen mills. Probably you or your mother have bought Saxony yarns.

The German forests also furnished material for Germany's rapid growth. Almost one-fourth of her area is covered with forests and these forests are conserved most carefully. They are all under government rules and whenever trees are cut down an equal number are planted. In that way they have had a constant though small supply of wood from their home land.

In addition to the raw products which she produced she imported many. Thousands of bales of United States cotton entered her harbor of Bremen. Petroleum was imported from this country for her dye industry. Many other products were imported to keep her factories busy.

© *Department of Waterways in Germany*

FIG. 44. Germany. The locks at Holtenen on Kiel Bay at the east end of the Kiel Canal. Locks are also used at the west, or North Sea, end of this canal for the purpose of controlling the tides.

You have seen that Germany has fuel and large quantities of raw materials for her factories. She also has an excellent system of cheap water transportation. Notice the map and see the large rivers which flow in a northerly direction across Germany. You will find the Rhine, the Weser, the Elbe, and the Oder. There are also canals connecting all of these river systems with each other. These cheap waterways are very valuable, as the great industrial centers of Germany are not on the coast. Instead, they are near the coal fields in the Ruhr Valley, near Chemnitz in Saxony, and in the southeastern part around Breslau. Rivers, canals, and railroads bring the many raw products to the factory districts and carry the manufactured goods to a German market or to a port for export.

Another reason for Germany's industrial growth is her use of scientific discoveries. She had raw materials for a large chemical industry and her scientists had the skill to use them. The German chemical industries grew until they supplied most of the world. They produce as many chemicals now as at any time, but few are sent to the United States.

We have left for last place one of the most important reasons for Germany's rapid growth in industry. During many generations and through many hundreds of years the German people have been carrying on home industries. During all that time they have really been so many apprentices. They have become very skillful and they have learned to take great pride in what their hands can make. Then, too, they are willing to work with their hands. So when machinery was introduced, there were all these skilled workmen to continue doing the finer work while the machines did the coarser work.

Now you should be able to name eight reasons why Germany was able to develop her industries so rapidly.

Today, wherever you travel in Germany, you find the people manufacturing. In large cities, villages, farms, and mountain regions they are working in their homes. And in all the cities they are working in the factories. Germany is like one great workshop. Besides the important industrial centers, there are cities scattered all over the country, each of which is noted for some particular product. No town seems to be too distant to have some important industry.

Some of Germany's manufactured products are shipped to the United States. Did you ever stop to think that you could learn a large amount of interesting geography just by stopping to notice where we get different things? They are made in many different countries. Our importing merchants go all over the world to buy things which are the best or the cheapest. They secure a long list of articles in Germany: chemicals, drugs, dyes, toys, machinery, aluminum ware, cotton laces and embroideries, cotton wearing apparel, earthen and china ware, millinery supplies, glass and glass ware, cutlery, leather gloves, musical instruments, furs, news-print paper, wooden ware, and many other things.

Only a few nations in the world have become great in industry and at the same time important in agriculture. Germany is one of the few that have succeeded in both. The main reason for her success in farming is her use of science. The government of Germany has encouraged scientific farming. It has established experiment stations similar to those in this country; it has established agricultural high schools and other agricultural schools; in these schools it has given special attention to the chemistry of the soil; it has aided the coöperative societies in the rural districts.

With this help Germany has improved and increased her crops. First, she has put fertilizers on her soil where

needed. Germany has the largest potash mines in the world. These produce large quantities for export. She also conserves all barnyard fertilizer most carefully. Careful fertilization and scientific farming have increased the yield per acre. During a period of twenty-five years the

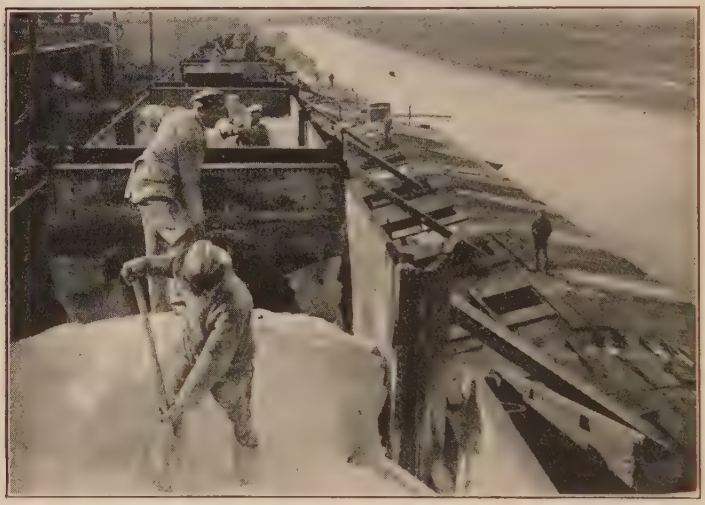

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FIG. 45. Germany. Loading potash on barges. These barges will carry the potash to the coast, where it will be put on ocean vessels for shipment to North America.

yield of wheat was increased from twenty-two to thirty-two bushels per acre.

Germany has also increased the value of her crop by selecting seed most carefully. Large quantities of sugar beets are raised on the poor soil of the plain, especially in eastern Prussia. Germany had the first large beet-sugar industry. When she first began to make sugar out of sugar beets, the cane growers of the West Indies laughed and jokingly called the sugar "chemical sugar." But her

industry grew and improved. In 1875 the beets raised contained less than nine per cent of sugar; by 1913, by scientific selection of the seed, the percentage had been raised to sixteen or more. Sugar beets had become one of the important world crops and Germany was furnishing most of the seeds.

The waste from the beet sugar industry was used to help another industry. The beet pulp and the beet tops were used as food for stock.

Another way in which Germany has increased her crops is by bringing some of the grazing land under cultivation. When land is sown to grass, the value of the crop is much less than when used for raising cereals; grapes, hops, and sugar beets produce more per acre than cereals. In order to supply enough food for densely populated countries like Germany or Great Britain the best possible use should be made of each acre of land.

The northern part of Germany is sometimes spoken of as grain lands and the southern part as wine lands. Of course that is only partly true. The northern part of Germany is a plain over which the glaciers traveled during the Ice Age. As the glaciers melted much gravel and coarse sand was left behind. This made poor soil and also formed swamps and marshes. Because of the poor soil and also because of the severe climate, the northern part is the least fertile. Oats and rye are the main cereals raised in northern Germany and rye is the chief bread grain. Potatoes are also an important crop in the north and beets are especially important in the east.

Parts of southern Germany have better soil than northern Germany. Wheat and barley are the main cereal crops there. The river valleys in the southwestern parts are the most fertile. There, on the sunny slopes, are grown the grapes which have given the region its name of "wine lands." Other fruits, tobacco, and hops for the large

beer industry which is centered at Munich are also raised in the south. The southern part also has more forests than the northern part and there the paper industry is important. Cattle and dairy cows are kept throughout Germany.

Western Germany is more productive than eastern Germany. In western Germany most of the cultivated land is divided into small farms and each owner works his own land. Each one takes good care of his farm, tries to make it produce as much as possible and become more valuable year after year. In addition to his crops, the farmer generally raises a few pigs, and on the larger farms he raises cattle. In eastern Germany, much of the land is poorer and is held in large tracts. It is worked by hired help, while many of the owners spend their time in town and give little thought to their land. Because of this the land in eastern Germany has not received the scientific care that the western farms have received.

In spite of Germany's careful use of the land she does not produce enough food for her large population. At present the United States is exporting to Germany large quantities of corn, rye, wheat flour, bacon, lard, sausages, and condensed milk. Germany is also buying foods in other countries.

The capital of the republic of Germany is Berlin. It is situated in the midst of the sandy, infertile plain of northern Germany. But the city itself is the greatest commercial and industrial city on the continent of Europe.

There are two very good reasons why Berlin has grown to be the largest city in Germany. It has a good location and it is the capital of all Germany as well as of Prussia.

In the Middle Ages a town was located on the present site of Berlin. There, in the midst of rivers, lakes, and marshes, it was fairly safe from attack. Many traders traveling from southern Germany to the Baltic ports passed through that town; other traders from the region of south-

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Fig. 40. Germany. A scene in southern Bavaria. This part of Germany has many beautiful mountains, but the northern part is a rolling plain.

eastern Germany going to the North Sea ports also passed that way. The site of Berlin became the crossroads of the two great routes.

Today main railroad lines follow the old routes. Besides, Berlin is the center of the network of railroads which cross the German plain in all directions. Berlin is also connected with many parts of Germany by water routes. It lies about halfway between the Oder and the Elbe rivers, and canals connect it with those rivers. Products from those large river valleys can be brought to Berlin by barge; other products can float from Berlin down the two rivers to their two great seaports, Hamburg and Stettin.

Berlin is, then, a rail and waterway center. Because of this, it is the natural market for the farm crops of a large part of Germany. Surrounded by land which raises oats and rye, Berlin has become the main center for the sale of grain.

The excellent railway and water service makes it possible to bring raw products to Berlin very cheaply. These supply many of the factories. The most important of these factories make machinery, clothing, and scientific instruments.

You think of towns which have many factories as being generally very dirty. But Berlin is famous for its clean streets, its ornamental electric lights, its modern sewers, and its excellent water supply.

Berlin was the center of court life before the World War and that was another reason for its rapid growth. In one of the suburbs you can see today the former royal palace. Many other beautiful buildings were the homes of the government officers who came from the different parts of Germany. At that time Berlin was also the center of army and navy life. Many of the people who came to Berlin to assist in the government or in the army or navy built beautiful homes there. Places of amusement also became

numerous. There were theaters and operas, hotels and restaurants, cafés and beer gardens, museums and art galleries. Berlin is still the center of German government life.

You have read of Berlin as the center of trade, industry, and government. There are other important cities in Germany of which you have not read: there is Dresden, a great center of art as well as a great industrial and commercial town; there is Leipzig which is, next to Berlin, the greatest inland trade center in Germany, and which has been famous for its market fairs for centuries; there is also Breslau, the chief center of eastern Germany. Besides these cities there are the great ports of the North and Baltic seas. Each one of these cities is an important part in the busy life of a very busy nation.

Austria became a part of Germany when Adolph Hitler, the Nazi, Chancellor took over the country which had submitted, March 14, 1938 - On April 10, election held

AUSTRIA

The Alps which cross central Europe like the backbone of a huge animal cover most of Austria, and make her a true Alpine country.

As one travels eastward from Switzerland and enters Austria it is difficult to realize that one is in another country. One is still in the midst of the wonderful Alps. The train travels slowly around great mountain curves, on high bridges over icy currents, and through long and black tunnels. The engine chugs along on its upward route. At last the Arlberg Pass is reached. Snow covers the highest peaks even in summer. Here the few pine trees are curved and shaken by the never ceasing winds. The peasants' wooden houses nestle behind a protecting rock and the slim tower of their little church rises above the other roofs. Looking downward you see a lonely valley. The train now moves more quickly down the other side of the divide. The valleys are broader and the

99% of those voting, voted for Hitler as dictator
Austria passes off the map of Europe.

pale green of the slopes becomes bright and deep. The shattered wind-shaken trees give place to little woods and patches of barley, oats, rye, and potatoes.

FIG. 47. Austria. A peasant house in Tirol. In what ways is this home suited to the peasant's life? Why?

Here and there lonely houses dot the landscape. These homes are like many in Switzerland. The poor cottager lives in a small wooden hut; his more fortunate neighbor has a larger home which is also made of the plentiful

wood. Many of these rural homes have pretty balconies, and the roofs are weighted down with heavy stones. Why do you think this is done? They house the cattle under the same roof with themselves.

If one could look inside, one would see how very clean everything is kept. They scrub their floors so much that they keep them almost as clean as their tables. Red and white mottoes made in cross-stitch hang on the wall, and express the peasant's deep religious feeling. The furniture, made of white fir or dark oak, is sometimes painted in bright colors.

From the car window one sees, at the crossroad, a wooden cross with the likeness of the Savior. A peasant stops before the shrine; he kneels reverently, crosses himself, says a short prayer, and, laying a tiny garland of flowers at the foot of the shrine, goes on his way happier because of his short devotions. There are many shrines along the road. Some of them are kept in good repair but others are left to topple to the ground. At another point one sees a crude painting which pictures some fatal accident which happened on the spot. Here, too, the peasant often pauses and breathes a brief prayer for the dead.

At other points tiny villages with their steepled churches appear and then disappear. Many streamlets tumble down from the mountains. They all join until the stream gets broader and deeper and becomes a large river. It is blue with silt from the melting glaciers. It is so swift it seems to be rushing headlong down the valley. This river is the Inn, and now the valley is broader and more fertile. Soon the train stops in the famous old town of Innsbruck.

Innsbruck, like most Austrian towns, dates back to Roman times. This route over which you have entered Austria has been a main line of travel for hundreds, even thousands, of years. But Innsbruck lies on an even more

important route, the one from north to south. Following that dangerous path over the Brenner Pass, the Roman merchant came, carrying his wool, silk, spices, and herbs to the barbarians. These he exchanged for gold, iron and salt. Later, the Roman soldier came across this path to conquer the Teutons. Centuries later the same Teutons went southward to destroy the declining Roman Empire. Again in the Middle Ages the German and Italian merchants traveled this same dangerous way. They carried their goods on the backs of mules or transported them in wagons and sledges. All this happened in the days before railroads were built. During the World War Innsbruck was a base from which the Austrian armies advanced over the old route upon Italy. Today Innsbruck is the commercial center for all of western Austria. But many old houses and the big central church, the "Hofkirche" (The Court Church), remind you of its medieval beginning.

Innsbruck lies in a little valley almost surrounded by snow-capped mountains. The mountains seem to peep at you through your window and at each turn in the street. Some of its streets are broad and traversed by street cars, but many are narrow and winding. Would you like to spend a summer week-end in Innsbruck? Then you will find the hotels filled with a healthy, active crowd. The dress of many of them will seem strange to you, for Innsbruck is in the midst of the Austrian Tirol. The men are dressed in short leather or woolen trousers which leave the knees bare. Many are gay in green or red checked coats and at the back of their felt hats there are feathers or possibly chamois' beards. They wear heavy woolen socks and heavy shoes, for many of the days in Innsbruck are rainy. The little boys are dressed in the same Tirolean costume. Even the quaint old street sweeper is proud of his Tirolean dress. Some of the girls, especially the younger ones, are equally gay in their flowered skirts and

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Fig. 48. Austria. Climbing a glacier. Notice the crevasses. Austrians are especially fond of walking and mountain climbing. Many also come from other countries to enjoy the sport.

bodices, white waists, and bright colored aprons. If you can understand the German you overhear, you will learn where these people live. Some have come from southern Germany for a holiday. Some are from Vienna and other parts of Austria. Some are from England and possibly you will see a few from the United States and still other countries.

You wonder why so many of these people have knapsacks on their backs. Your hotel proprietor tells you that they are going to climb up the mountains. Would you, too, like to put a knapsack on your back, and, with alpenstock in hand, get nearer to the snowy tops of the mountains? You can climb along the banks of the Inn until Innsbruck is left far behind. You walk through small but rich meadows until you reach the head of the valley. There one or two blockhouses are the only human dwellings. Around them the cattle and goats are grazing. Inside the hut, a woman is cooking some milk or other simple food over an open fire. These high valleys, as in Switzerland, are called the alms or alps Here, too, a lonely herder guards his flock. You might pass the night here sleeping on a bed of dry grass and in the morning be ready for a further climb. Then you could climb until you reach a great glacier covered with débris and cut by dangerous crevasses. You could wander still higher and finally at the edge of the glacier come to a tourists' hut.

From this height everyone gets a wonderful view. No other human beings are in sight. Perhaps you see an eagle or a vulture soaring in the sky. The cataracts pour down their waters. Farther down, where the snow disappears and the scanty grass grows on the rocky soil, you may see a shy chamois.

Nowhere does one find more Alpine huts and Alpine clubs than in this Tirol region. There are Alpine clubs which have more than a million members. The largest

is the so-called German-Austrian club, in which each section bears the name of a German or Austrian town. Some of the huts provided by the clubs are on the summits of

FIG. 49. Austria. These three peaks are the "three ladies" in the Alps of southern Tirol. A tourists' hut is in the foreground.

mountains; others are at the heads of high valleys, and others are on stone banks between the glaciers. If you were to visit the Berlin hut, you would think you were entering a large hotel, for there are places for a hundred

guests, good food, and many other comforts. Other huts have only one room which must be used for both cooking and sleeping. The beds are merely rude bunks with warm blankets. When the Alpine climber reaches the hut, he unlocks the door and enters. He finds fuel and soon has a warm fire blazing. He opens his knapsack and eats his well-earned meal.

Tourists and their guides are always coming and going in these Alpine huts. Many renowned travelers are among the guests, and in the evening all gather around the fire and each tells the tale of his own thrilling adventures.

One finds many fine fellows among these mountain guides. Each must have passed an examination before he became a guide to make certain of his skill. He must be a good walker over stone or ice; he must know about the weather, how to give first aid, and how to read maps. And last of all he must know how to cook! Often life-long friendships spring up between tourists and their guides.

Although Tirol is a playground for tourists, it is not a playground for many of the peasants who live there. Although most of the peasants own their land there is much poverty in the higher valleys. The soil is stony, the climate is severe, and tiny areas between the rocks yield only small quantities of rye, potatoes, or oats. Fertilizer and even dirt have to be brought in by the basketful. The harvest is very poor compared with the labor required. Many are obliged to leave the valleys in order to make money. Children, even, are sent to southern Germany in the summer to act as shepherds and shepherdesses, and they do not return to their homes until the autumn.

After climbing the mountains and wandering through the narrow valleys of Tirol, one must return to Innsbruck in order to take a train to Vienna. Then each traveler hopes for fine weather, for if the day happens to be clear

the view is beautiful. The train winds through the narrow valleys beside the rapid Inn. High mountains rise on both sides and as the train brings new views into sight each seems more beautiful than the last. The farther east you go, the lower become the mountains, the broader and more fertile the valleys, and the larger the rivers. Instead of snow

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FIG. 50. Austria. There is little level land in this country and so many of the slopes are cultivated. In spite of that, Austria does not raise enough food for her own people. This scene is typical of much of Austria.

and ice you see large forests of pines and firs. The center of the valley and the slopes at the north are covered with green fields. On the other side the slopes are shaded and produce little. Here as in all the Alpine region, weather-beaten castles are situated on many of the prominent hills. These were built by the knights of the Middle Ages, more for fortifications than for homes. A few are still inhabited but most of them are now merely picturesque ruins.

Leaving the region of the high Alps, one reaches the plateau between the Alps and the plain of the Danube. High mountains clothed with black forests rise above yellow wheat fields. Here grow corn, grain, apples, pears,

FIG. 51. Austria. This country has much forest land. Many of the trees are cut and supply materials for furniture and paper pulp mills. Some are used for fuel and some are made into charcoal as in this picture.

apricots, and nuts. In the woods one sees peasant folk gathering pails of wild strawberries, raspberries, and mushrooms.

Soon one arrives at the city of Salzburg. It is located on the border of the Alps and the plain, having the charm of

both. Many think it the most beautifully located city in all the Alps region. But its climate is so rainy in summer that few travelers can linger there long enough to see Salzburg at its best. Salzburg is the birthplace of Mozart, the famous musical composer, and each year a great musical festival is held in his memory. Today Salzburg is the most important city in central Austria.

On the edge of Austria's small plain and on the Danube River lies the city of Linz. Fertile and well-cultivated plains surround it. Here the large fields of wheat and oats, truck gardens, and fruit orchards help to furnish food for Vienna's large population. Many towns and villages are scattered throughout the entire plain, and one almost forgets that the Alps are only a short distance away.

The train finally reaches Vienna. Here Austria looks in two directions: toward the West is the culture and industry of western Europe; toward the East are the broad plains of Hungary and Rumania where agriculture is an important industry.

Vienna, like the other cities of Austria which we have mentioned, was founded in Roman times. Its site is the crossing of several great valleys. The valley of the Danube River leads to the east and west. The valley of the Morava River leads northward from Vienna and joins it with the regions of eastern Germany and Poland. Another valley leads through the beautiful Semmering Pass to the southwestward and is a route over which many of the old Romans journeyed. In Roman days the site of Vienna was occupied by a large Roman camp which protected the passage over the Danube. There the merchants of many nations met to exchange goods under the protection of the Roman legions. The Roman camp developed into a fortified town surrounded by a circular wall.

Vienna still bears traces of the Roman days. The form of the four main streets of the old Roman camp is still to be

seen in the "New Market" place. As the town outgrew its first circular wall the portion inside the wall was called the Inner City. Later a second circular wall was built outside the first. On the site of the older of the two walls the beautiful Ring Street has been built. A wide boulevard now occupies the site of the second wall. The cross streets of Vienna radiate from the center of the Inner City and cut the circular streets so that the entire plan reminds one of a giant spider's web.

In the Middle Ages the Bavarians of southern Germany migrated south and east from their home lands and occupied the site of Vienna as well as the other parts of Austria. You might say that the Bavarians colonized Austria just as our own country was colonized by people from the different parts of Europe.

What language would you expect to find the Austrians speaking? Travelers not only expect to hear the Austrians speaking the German language, but they expect to find them like the Germans. But no sooner is one in Austria than one feels the difference as an American would feel the difference in going to England. The German will tell you that the Austrian is careless of his grammar and pronunciation, for the German is exact and determined in everything. He tries to plan his life with scientific care, while the Austrian is less painstaking in everything and is likely to consider life a pleasure rather than a duty.

The Cathedral of St. Stephen raises its tall steeple in the center of the Inner City. Is it any wonder that St. Stephen's is called "the heart of the capital"? Wandering around Vienna, one is always guided back to the center by St. Stephen's outstanding spire.

In many of the cities of the world the older portions of the town are dilapidated, but this is not true in Vienna. In the Inner City is the former Imperial Palace, the Hofburg, a collection of buildings, gardens, and large courts

with costly monuments. Since the death of the emperor and the establishment of the republic the different parts of the building have been given over to various uses. Some of the rooms once used by the royal family are now on exhibition and are visited by hundreds of sightseers each week. Other parts of the buildings are used for shops and offices. The royal stables still house many of the white Arabian horses which were once the pride of the Crown. But today there is little about the Hofburg to bespeak its former grandeur.

Many public and other important buildings are located in the Ring Street. There you will find the National Theater, the Museum of Natural History, the School of Art, the Parliament Building, the Town House, two large theaters, and great hotels. Many of the famous Viennese coffee houses and restaurants are also located on the Ring Street. Strangers, as well as the Viennese, spend many of their lunch hours at the coffee-house tables, for they all are driven out of the shops during the siesta hour. One sits in comfortable chairs and watches the ever changing crowd. Each coffee house has its own particular patrons. Actors

frequent one, diplomats another, political refugees from Hungary another, and Russian refugees another.

Within very short distances of the Ring Street are six great concert halls where people hear the best music, sometimes free of cost. A little farther away is a large opera house where operas are heard during many months of the year. It is with pride that Austrians point to these halls of music and name the famous musicians whom their country has produced. They also point with pride to their University with its famous medical school, in which many American doctors have received a part of their medical education.

With all these centers of music, art, and learning, the traveler finds Vienna a place of great interest. Its buildings, though often cramped and dark in the interior, are beautiful on the outside. Street cars, automobiles, and carriages furnish excellent transportation. And while the shops cannot vie with those of New York, London, or Paris, they display many attractive articles —furs, laces, leather goods, embroideries, books, etchings, and paintings.

You would find housekeeping very difficult in Vienna. Few families live in their own separate houses. There, as in most of the other continental cities, they live in apartments. Many of the apartment houses are five stories high and even the best do not have elevators. So if you were to live on one of the upper stories, where there would be less noise and dirt from the street, you would have a long climb, especially since each story is very high. Then, too, few buildings have a heating system, and the fuel for the porcelain stoves must be carried up long flights of stairs. Then the ashes must be carried down. There are few stationary wash basins. All water must be carried back and forth. Dumb-waiters, elevators, vacuum cleaners, and fireless cookers would add greatly to the comfort of life.

FIG. 52. Austria. This wholesale and retail market in Vienna is about eight blocks in length and four rows of stalls in width. Fruit, vegetables, meat, and dairy products are sold.

A short ride on a street car will carry you to the outskirts of Vienna. There groups of busy people, after their day's work in town, are building homes for themselves. They have seized the old deer parks of the emperors and other open spaces and the government has given them the right to hold the land. Now each of these families can have a garden and keep poultry. The building of these hundreds of homes will give more room for people in the city and the little gardens will help to supply the much needed foodstuffs.

Probably no nation on earth enjoys holidays more than the Austrians. Most Austrians are "week-enders." Do you know what that means? On Saturday and Sunday crowds turn out to walk or climb. Many go to the "Wiener Wald" or "Woods of Vienna" in the foothills of the Alps. At six o'clock in the morning the railway stations are jammed. After a jolly ride of two or three hours on trains, street cars, busses, or bicycles, the merry-makers reach the country. Then the real fun begins. They follow the carefully laid-out footpaths, well guided by the colored stripes on trees and posts. Some lie on the grass and eat their lunch in the shade of the trees; others play their beribboned guitars and sing as they go to the clean, cheap inns. In winter the scene is all changed. Then the people go to the country on snowshoes and skis.

The Viennese also enjoy their large amusement park called the Prater. It comprises hundreds of acres along the Danube River and is a favorite promenade and drive for rich and poor. The main avenue is bordered by great chestnut trees. Music is heard from every direction and the orchestras play both the best and the gayest music. The merry-go-rounds, scenic railways, and other amusements remind one of New York's Coney Island. While the children enjoy these, the elderly people sit and chat in the comfortable coffee-houses and enjoy the good music.

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FIG. 53. Austria. Austria is a mountainous country. What do the things you see in this picture suggest to you?

The greatest day of the year at the Prater is Whitsuntide, the main confirmation day in Vienna. Then the godfathers and the godmothers take the children for a merry drive through the park. Horses, carriages, autos, and even the people are decorated with white flowers.

Most of the Austrian festival days are religious holidays. St. Nicholas Day, the sixth of December, is a great day for the children. Then St. Nicholas with a long, white beard appears. He carries a bag full of apples, nuts, and cakes to all the good children. His companion, "the Krampus," a black devil with a whip and a bag, is supposed to follow him and carry away the naughty children. But as all children are good about that time you hear no tales of his bag being filled. As St. Nicholas cannot visit every home, the children hang their stockings and shoes near the window, so that he may fill them as he passes. And the Viennese children are very happy at this time of the year.

Vienna developed into a large city when it was the capital of a large monarchy, Austria-Hungary. Before the World War, Austria-Hungary was one of the most important kingdoms of Europe. After the World War it was divided among seven nations: Poland, Rumania, Hungary, Jugoslavia, Czechoslovakia, Italy, and Austria. The new republic of Austria is made up of the German-speaking provinces. It is only one-fourth of the area and population of former Austria. All of the government and other state buildings in Vienna were made large enough to carry on the business of a great empire. It is a question as to whether a very small country can support those large buildings.

You have read that much of the area of Austria is occupied by the Alps. Because of this only a small part of the area is cultivated. The people in the country can raise their own foodstuffs, but they cannot raise enough to supply Vienna also. Austria produces less than one-

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FIG. 54. Austria. The lakes of Austria are not so large as those in Switzerland, but they add much to the beauty of the country. Would the water in this lake probably be cold or warm in summer? Why?

half of the grain and fodder that she needs, only two-thirds of all the potatoes, and one-fourth of the beans and peas. She raises but little sugar. All of these foods she formerly bought from the other parts of the Austro-Hungarian empire. Now she is cut off from these productive agricultural regions and must import from the new states or from other countries much needed foodstuffs.

Vienna was formerly the industrial center of Austria-Hungary as well as the center of government. She secured many of the raw products for her factories from other parts of the kingdom. Now many of her factories are idle and most of those which are running use raw products imported from other countries. Plenty of wood is furnished at home, as almost two-fifths of Austria is covered with forests. Pasturing is an important occupation in the Alps, and hides are supplied for Austria's leather industry. Most of the other raw products must be imported. Vienna has factories for textiles, iron and steel, tin and bronze ware, chemicals, and optical instruments. Unfortunately many of her manufactured goods were luxuries. Her leather goods rivaled those of Paris. Her jewelry was renowned and she was a center for toy-making. Today the Viennese consider themselves fortunate if they can buy the necessities, and few people who might buy luxuries now visit the city.

Vienna and the smaller industrial centers of Austria are much handicapped by the lack of coal. About eighty-five per cent of all the coal which is used must be imported. In fact, foodstuffs and coal are the two chief imports of Austria.

The shortage in coal also hinders the development of the railroads. Austria has begun to electrify her railroads, but she can make little progress in that because of lack of funds. Some day her abundant water power will be fully developed and electric energy will then be used to run the railroads and many of her factories.

The most important mineral resource of Austria is her iron ore. Some of her iron mines have been known ever since Roman days. There is still enough iron ore to supply Austria's own needs for several hundred years. Graz, the second largest city in Austria, is the chief iron and steel center. Today iron and steel products are the most important exports of Austria.

Austria is one of the states of Europe formed after the World War. She faces many difficulties. It will be difficult for her to become accustomed to the rival nations and their various systems of tariff. It is a difficult task to change from an age-old system of monarchy to a successful republic. She lacks a harbor of her own, for she has lost Trieste. She does not produce foodstuffs enough for her own people. Both coal and raw products must be imported for her factories. She has little capital to develop the few resources which she has. These are some of the problems that Austria faces today.

Chapter V

SWITZERLAND

Switzerland has long been called the playground of Europe. Many people from other countries go there to spend their leisure time. Many like to go to St. Moritz which lies in the high Alps of eastern Switzerland.

The village of St. Moritz nestles in the upper end of the Inn Valley. It was once a small village where the peasants went to drink the sparkling mineral waters and to bathe in the primitive little bath-houses. It is now one of the most fashionable places of the world, where, in both winter and summer, the richest of the rich people gather.

St. Moritz is well situated on the shore of a tiny lake. Low, pleasant hills with green meadows and dark forests of fir encircle it. Beyond are rapid streams cutting their way into the mountains. They leap over foaming waterfalls and rest for a time in clear lakes. Glistening glaciers and steaming hot springs attract the visitor. On one side of the lake, the woods and meadows have given place to a colony of big hotels. Every year more hotels, each larger than the others, are built. These modern buildings impress one with their size, comfort, and excellent service.

In summer St. Moritz is frequented mostly by ailing, elderly people who wish to benefit from the baths; in winter it is left to the young, healthy, and wealthy who enjoy an outdoor life. In winter all is covered with snow—the highest glaciers, the mountain peaks, the little hills, the lake, the roads, and the houses. There is snow as far as

Courtesy Swiss Federal Railways

FIG. 55. Switzerland. A hockey game at St. Moritz. The sun is warm in the middle of the day and that is the time for all sorts of sports. Fir trees grow in the valley. Are there any trees on the higher Alps? Why?

the eye can reach. It is in the midst of that beautiful setting that the thrilling winter sports are carried on.

A few of the strongest and most daring tourists leave the others behind in the valley and ascend the dangerous mountain peaks. They start shortly after seven, at sunrise, for they must return before the early setting of the sun. There are only a few hours of daylight for the climbing and that increases the danger. Passing a night under an open sky in summer may be a pleasant adventure, but here in winter it is certain death. The climbers slip over jagged rocks and sink into the soft snow. The burning midday sun soon makes them lay aside their fur-lined coats and finally even their sweaters. On the high peaks they are as comfortable in their shirt sleeves in December as in the meadows below in May and June. And when they reach the top they are rewarded by a glorious view. In the deep valleys lie the heavy fogs, but on the mountains there is the brightest sunshine. All who ascend agree that the beautiful view and refreshing air more than reward them for the dangerous climb. This stimulating warmth of the winter sun at great heights is the chief attraction of St. Moritz and all other Alpine winter resorts. Nights, mornings, and evenings are fearfully cold, but the temperature of the middle of the day feels like a fine spring morning. This is the time for outdoor life.

While a few are climbing the mountain peaks, many are enjoying themselves on the frozen lake, for it is the real center of the winter sports. Men, women, and children, dressed in bright-colored woolen garments, are moving about on their skates. Here a couple are practicing difficult figures for the next competition. There two girls are waltzing. A short distance away an old gentleman is taking his daily exercise in long, slow glides. A young man with sharp slender skates is training for the next race. An animated group is playing the game of curling.

Another group is chasing the hockey puck. Yonder is a young man with a sail attached around his waist and shoulders. Can you tell what he is doing? The band is playing; everything is bright and gay; and the happy crowds on the shore watch the gay spectacle.

The hills surrounding the lake are alive with those who prefer tobogganing. At St. Moritz and at other Alpine resorts, grown-up people enjoy tobogganing as much as the children. Runs, or artificial roads, extend from a great height in the mountains to the valley below. The difficult curves are dug out of the deep snow. Water is poured over the road and when it freezes it leaves a very slippery surface. Then down come the loaded toboggans, faster and faster around the dangerous curves and over the steep grades at sixty miles an hour.

In the streets one sees the children of the villagers enjoying tobogganing with their home-made sleds. As soon as they are out of school they carry their sleds to the top of the hill and then go racing down into the village with the greatest speed. The loiterer is likely to be run over by these little sportsmen as they come down the hill shouting and laughing.

Skiing is also popular at St. Moritz. Some of the best skiers in the world are seen there. The ski was at first used only in Norway and Sweden; now it is in common use in the Alps both for sport and practical purposes. Sometimes the skis help to turn work into play, as in the Black Forest. It is not easy to manage skis, but good skiers are able to climb the most difficult snow-covered mountains. Sometimes international racing and jumping competitions are held here as in the northern countries.

Elderly people have fun at St. Moritz, too. There are big brightly painted sleighs filled with comfortable cushions and warm fur robes. The horses are decorated with plumes, and as they trot along the sleigh bells jingle at

their every step. These sleighs carry the happy people from village to village and from one hotel to another.

At sunset a lull falls over the streets of St. Moritz. The bitter cold drives the people to the warmth of indoors. Then St. Moritz takes on the appearance of any other fashionable health resort. There are dinners followed by lively balls and theater parties. The next morning, when the sun rises, it again calls one to the gay and healthy life of the winter sports in the Alps.

There are many other places in the Swiss, Austrian, Italian, and French Alps, which are just as beautiful and attractive for outdoor sports as St. Moritz. Few are as fashionable as this beautiful spot, or as expensive. Do you wonder that tourists are attracted from all parts of the world to the many Alpine resorts?

You have read that a few of the bravest enjoy mountain climbing in winter. In summer it is a popular sport in all the Alpine region. The Alps have many high peaks, some of which are crowned with great glaciers, while the tops of others are nothing but bare rock. All of these peaks have been climbed by the enthusiastic mountain climbers. Many Alpine clubs, Swiss, French, English, and others, encourage their members in this exciting sport. They build Alpine huts, mark trails, and furnish guides.

Can you see the people preparing for a climb? They put on warm woolen clothes. Then with alpenstocks in hand and knapsacks on their shoulders they start out. The trusty guide carries a rope and a hatchet. It may be necessary to tie the members of the party together, so that if one slips the others may keep him from falling. And the hatchet may be useful in cutting steps in the slippery ice of the glaciers. The path at first seems easy. Then the climbers reach precipitous walls of rock. Here each step must be taken very carefully lest a loose rock roll

from under foot. They climb great glaciers where deep crevasses cross their paths like so many wicked traps. One misstep and they would fall into the icy chasm. From the glaciers they again climb on rocky cliffs and come to an Alpine hut. If night is coming on they stop there until morning, but if there is time to reach the top and return before sunset they hurry on. It seems as if each glacier that must be crossed adds a new temptation to the mountain climber and that each peak is a tantalizing object until it is scaled.

Skillful engineers have also climbed many of the Alpine peaks and built cog railways. All the joy of having accomplished something difficult is lost when one rides in comfort up the steep mountain-side. However, thrills are not missing, and in this way a larger number of people enjoy the wonderful views from the top.

By making the Alps into a great playground, the Swiss have turned their unproductive area into a paying one. Over one-fourth of Switzerland is unproductive, for it is covered with barren mountain peaks, sterile glaciers, and rugged canyons. But today this unproductive region is the great wealth of Switzerland. The beautiful scenery and the mountain climate attract several millions of people to Switzerland each year. Large hotels and smaller inns have been built to accommodate them and good railways carry them to many of the most interesting places. The hotel and inn keepers, the tradesmen, and many other workers profit by the presence of the tourists.

Does it seem possible that seventy-five years ago almost nothing was known about glaciers? In the charming old city of Neuchatel, on a lake by the same name, there lived a young man who saw things that others did not see. This man was Louis Agassiz. During the winter, he studied the fresh-water fishes of Neuchatel. In summer, he went to the glaciers and learned that they moved. He also

made the discovery that a glacier is like a big bear, for it, too, leaves tracks. By studying these tracks, he was able to give us a great deal of knowledge about glaciers. Today, many of the countries which were once covered by glaciers tell their story to all who can understand.

While the Alpine mountain region is a playground for many people, it is also a place in which many of the Swiss must work very hard to make a living. In all the Alpine land, only the broader valleys can be cultivated. Only eleven per cent of Switzerland can be cultivated and most of the farmers must increase their income in some other way. They do this by using the high mountain pastures for grazing purposes, thus making dairying, instead of farming, the most important industry in the Alpine region. These mountain pastures are called "alps." Do you wonder why the whole mountain chain has been named after these pastures? Possibly it is because, for many centuries, these pastures have been very important in helping the people to make a living. As you read the description of the pastoral life in the Alps, see if you think that the mountains are well named.

Most of the Alpine people have their homes in the lower valleys where each can own a small piece of land for farming. But in the spring the people prepare to take their cattle and goats to the higher valleys for the summer. The whole valley seems alive with excitement. Even the cattle which have been housed all winter seem to be thinking of their annual trip to the "alps." The men who are to take the cattle to the "alps" are selected and each household makes its preparations. The needed utensils must be packed in the wagons. There are large copper kettles, many milk pails, and all the wooden dishes for the making of butter and cheese. Then, too, flour and a few other simple groceries must not be forgotten, for each lonely herder stays in the "alps" all summer.

FIG. 56. Switzerland. An alp or mountain pasture. The cattle spend the summer feeding on the luscious grass of the high valleys. Each night they return to the huts. Here the herders live all summer and make butter and cheese.

About the first of May the preparations are completed and herders and cattle start toward the higher valleys. It is a day of rejoicing and celebration. The excited cows go ahead, driven by the cowherd. Behind come the loaded wagons. They pass the fields where a summer crop of wheat, oats, rye, and potatoes will be raised. Higher up, they pass grapevines, and apple, cherry and walnut trees. But they do not travel far, for only the lower valleys are free from snow. During May the cattle are permitted to graze in these lower valleys, which are named "May meadows." But as soon as the snow has disappeared higher up, the cattle are driven there, for the May meadows must be cropped for hay and the cattle must eat as little of the grass as possible.

As the cattle go higher they follow carefully laid-out paths through the forests. They linger in one valley and then in another, always going higher up as soon as the snow disappears. Finally they reach their summer quarters, high above the timber line, where green meadows lie between rocky mountain peaks. There, during July and August, the cattle feed on the rich mountain grass.

These high pastures cover about one-fourth of the Alpine lands. Here the clear air and warm sunshine produce a luscious grass which gives a special flavor to the dairy products. All summer long the faithful herder tends his cows and makes his butter and cheese. His rude hut is a mere shelter and workshop. At nightfall, from his lonely hut, he calls on his long Alpine horn to herders in other valleys. His shrill yodel echoes and reëchoes from the rocky peaks.

When the first flurries of snow begin, the cattle start towards home. The summer's butter and the famous Swiss cheeses, large as cart wheels, fill the wagon. The cattle linger in the lower valleys to feed until they are driven

Courtesy Swiss Federal Railways

FIG. 57. Switzerland. The home of a prosperous peasant in southeastern Switzerland. Many peasants keep a "guest house" for the occasional traveler.

farther down by the snow. They finally reach the May meadows where a small crop of grass has grown up since the hay was cut. At last they near the village. The herder decks himself in gay garlands, and his cattle, too, are decorated with mountain twigs. All the villagers are out to welcome them back, for these cattle are the chief wealth of the mountain folk. Those who have remained at home during the summer have been as busy as the herders. They have been raising their crops and cutting the hay for the winter food for the animals. Besides, not all of the cows of Switzerland are driven to the alps for summer pasture. Some are fed near the factories so that the fresh milk can be used in making condensed milk, milk chocolate, and prepared baby foods. Many of those milk products are exported from Switzerland and some come to the United States. Have you ever seen any of those Swiss products?

During the winter there is little work outside. Then the faithful animals are housed in warm stables, which are generally a part of the building in which the family lives. This is the time when the children get their schooling, for, like their parents, they are busy at other work during the summer. Then, too, the members of the family carry on home industries. Some spin and weave the material for their clothing. Many do wood carving. Some carve the furniture which is needed in the homes, but many carve souvenirs to sell to tourists. In the summer tourist season the curio stores are filled with hundreds of carved objects. You could buy a charming carved model of a Swiss house, or chalet, all carefully made, and either large or small. There are carved Swiss cows of many sizes and also carved chamois, though the live chamois are seldom seen now. You might buy edelweiss carved from wood or ivory or select other beautiful things from the many other things offered.

You have seen that Switzerland is well called the playground of Europe and that the Alps are the seat of an important Alpine industry. Another hint of their importance lies in the fact that they have been called "The Cradle of European Rivers." Let us see why. The Alps begin near the Gulf of Genoa and extend through Switzerland and Austria to the plain of Hungary. Among the great Alpine peaks, many of the important rivers of Europe rise, being fed by the water from the melting glaciers. Four important rivers rise near the St. Gothard peaks. The Rhine River rises east of those peaks and flows, at first, northeastward. The Rhone River issues as a torrent from under the glacier on the opposite side of the peaks and flows southwestward. The two sources are only a short distance apart, and one might say that there the two rivers seem to turn their backs on each other. The Rhine pours its milky waters into Lake Constance. There the glacial silt settles to the bottom of the lake and the river issues in a clear stream at the other end. It tumbles over the beautiful Schaffhausen Falls and then carries great quantities of freight for the Germans, French, and the Dutch before it flows into the North Sea. The Rhone River, which starts in the opposite direction, is filtered by passing through Lake Geneva. It issues at the west end of the lake and becomes an important French stream which finally flows into the Mediterranean.

The Aar River also rises in the St. Gothard peaks and is the most important Swiss tributary flowing into the Rhine. A fourth river rises on the southern slopes of this same knot of mountain peaks. It is the Ticino. Its swift current finally brings it to the beautiful Lake Maggiore, after which it flows across the fertile plains of Lombardy and empties its water into the Po River and the Adriatic Sea. The Inn River also has its source in Switzerland. For a distance it runs parallel to the Rhine but to

the south of it. The Inn flows into the Danube River, which carries its waters to the Black Sea.

Many less important rivers also have their sources in the Alps, the top of the continent. There the hundreds of melting glaciers help to furnish a supply of water to the rivers. These rivers flow into the four great seas on the borders of the continent. Can you draw a map which shows these rivers and the seas into which they flow?

The Alps which have made Switzerland the playground of Europe and are the source of many rivers have always been a great barrier to travel. They lie across the paths between the Baltic and the Mediterranean ports. In early days rough mule paths led across the mountain passes. The traders from the south followed their slow way up the mountain valleys from Italy until they reached the high passes. There they crossed the divide and descended on the other side. Later the paths were widened into wagon roads. But in the winter the passes were buried under many feet of snow and many people lost their lives in trying to get across. Today these high mountain ranges are pierced by dark tunnels and the railroads have a safe route even when the high passes are covered with snow.

One of the most famous of these tunnels is the St. Gothard. The St. Gothard railway climbs up the valley of a Rhine tributary. It skirts steep precipices, crosses rushing mountain streams, and passes distant glaciers. Then, in order to climb a steeper grade, it makes three spiral turns in the solid rock. Three times the track enters the side of the mountain, and after an almost complete circle issues from the rock at a higher level. Immediately after the last spiral turn the track enters the famous St. Gothard tunnel. Three-fifths of a mile above, lies the dangerous St. Gothard Pass. After coming out from the

Courtesy Swiss Federal Railways

FIG. 58. Switzerland. The St. Gothard Express run by electricity. After going through this town, Wassen, the train enters the third of the spiral tunnels. Why has Switzerland electrified her railroads?

St. Gothard tunnel, the railroad descends the steep southern grade by means of four more spiral tunnels which remind one of a broken, but enchanted, spiral stairway.

This railroad through Switzerland joins Germany and Italy and is the main line of travel between those countries. All three nations united in building it, although Italy bore one-half of the entire expense. Since then the Swiss government has purchased the entire railroad.

A short distance southwest of the St. Gothard tunnel, the Simplon tunnel pierces the high southern Alps. One enters the tunnel in Switzerland, and after riding about thirteen miles comes out at the other end in Italy. This tunnel is the longest tunnel in the world. When the engineers began work on it, two crews started to work from the opposite ends. They drilled and dynamited their way through the rock, and finally met at the center. Four thousand feet of rock lay above them. If they could have looked up, they would have seen the peaks of the mountains 7000 feet above.

Many other tunnels have been bored through the Alps Mountains and furnish safe routes for the heavy tourist traffic as well as for the regular passenger and freight service through Switzerland. Most of the traffic is through the tunnels, but today the high passes are crossed by motor roads, and during the summer many still enjoy that route across the Alps.

Because the mountain ranges of the Alps curve in crossing Switzerland, the country may be said to face in three directions. Part of it faces Italy; another part faces France; still another part is turned toward Germany. Can you picture the southern slopes of the Alps facing Italy? They become less and less rugged until they merge into the plain of the Po Valley. Who would naturally settle on those southern slopes? The Italians who live there are called the Italian-Swiss. Western Switzer-

land was settled largely by French and they are now called the French-Swiss. Since the high Alps are in the southern part the larger portion of Switzerland slopes toward Germany. Then, too, the valley of Switzerland, between the Alps and the Jura Mountains, opens toward Germany. So the Germans settled in the valley and on the adjoining slopes. Seventy per cent of the people of Switzerland are German-Swiss.

When one travels in Ticino, the Italian canton of Switzerland, it is difficult to believe that one is not in Italy. Italian is spoken on every street corner. The arcaded streets remind one of Italian streets. The same picturesqueness pervades the Ticino lake district as one finds everywhere in the lake district of northern Italy. In northern Switzerland, German is the language most frequently spoken and the buildings are patterned after German architecture. Around Lake Geneva in western Switzerland the French tongue is heard on every side. Even the buildings show the influence of the French. All three of these languages are taught in the public schools. Many cities have a different name in each language. The French say Genève; the Germans call it Genf; the Italians call it Ginevra. In English it is Geneva. The Germans call the city Basel while the French call it Bâle and we frequently write it Basle. The French called a city Bienne which the Germans called Biel. Now they have compromised and the post office is known as Biel-Bienne. Since all three languages are spoken in Switzerland, many go there to learn those languages.

Each of the larger cities of Switzerland has many boarding schools for foreigners, and there are six great universities. Some of these schools are conducted in the English language. In these schools young people from the United States and England mingle with the youth of continental Europe. Children of rich and educated South Americans

study side by side with those from Canada, Mexico, South Africa, and the Orient. Learning to know all these nationalities is a great education in itself.

Not all Swiss people are fortunate enough to be able to speak several languages. Many of the peasants speak only their mother tongue. Trips out into the rural districts take one into many different valleys where the people are separated from each other by high mountains. Because of this separation, many regions have developed dialects of their own, dialects of the German, Italian, and French as well as of still older languages.

The high mountains of Switzerland which have separated the Swiss people from each other have also acted as mighty fortresses, keeping out invading armies. While wars have raged all around her, Switzerland has remained free and peaceful for centuries. For many hundreds of years she has maintained her republican form of government in spite of the great monarchies that had grown up around her. Today Switzerland is often spoken of as the "brave little republic."

Switzerland is made up of twenty-two cantons as the United States is made up of states. In Switzerland, as in our own country, the central government makes all laws which apply to the entire country.

Within each canton there are communes which are something like our counties. These communes may own some property. On the outskirts of the village, they often own lands and forests, while in the towns houses belong to them. The land is used for pasture; the forests help to furnish the winter wood; and rent from the houses helps to pay the government expenses. In any case the proceeds reduce taxes in the commune and rich and poor may receive alike from this fund. When the commune is very rich, as some are, even the tax of the central government is paid from what is earned on the common property.

Courtesy Swiss Federal Railways

FIG. 50. Switzerland. Many chestnut trees grow on the southern slopes of the Alps in Switzerland and Italy. Chestnuts are a common article of food among the people. What members of the family help to harvest the crop?

You have been reading about the Alps, but not all of Switzerland lies in the Alps. Along its northern boundary are the Jura Mountains and between them and the Alps lies the valley of Switzerland. The majority of the Swiss people live in this rolling valley between the two mountain areas. Some of them make their living there by farming, but most of them make it in manufacturing.

Since Switzerland does not raise enough foodstuffs for her own people they must earn money to buy foodstuffs from foreign countries. So they import raw products which by means of much work and skill they manufacture into products which can be sold abroad.

The manufacturing industries of Switzerland have developed through several centuries. Several hundred years ago French watchmakers settled in Geneva and in the region around. Others learned the trade and after a time Switzerland began to turn out the best hand-made watches in all the world. The industry grew, and hundreds of thousands were employed in the art. Swiss watches were in great demand. Then the factories of the United States began to turn out large numbers of excellent machine-made watches which lessened the demand for the hand-made watches of Switzerland. What do you think the Swiss did? They, too, established factories and now their factory-made watches compete with our own. Watchmaking is still an important industry there and the best Swiss watches are very beautiful and excellent timekeepers. Many Swiss watches are still sold in this country. Switzerland sometimes exports as many as eighteen million watches in a single year.

As the making of watches and jewelry is concentrated in the western part, so the textile industry is important in the north and east. Have you ever gone to the store with your mother to buy silk and heard the clerk say with pride, "This is Swiss taffeta"? Zurich is the center of the silk

industry, while Basle is well known for its beautiful silk ribbons.

"Dotted Swiss" is another important product of Switzerland. This thin cotton material in which polka dots are embroidered is very popular for summer dresses for women and little girls. The factories of St. Gall and Zurich turn out the best quality of this material and the embroideries of St. Gall are world famous.

As in Germany, many of the Swiss industries started in the homes, and much skill was developed there. Then coal was imported and large factories were built. Today many of the factories are run by electric power which is generated by the mountain streams. In order to use electric power they had to make suitable machinery and dynamos. When they had supplied their own factories with those machines they made similar ones for export. Now the making of machinery is one of their important industries and is centered at Zurich.

Does it not seem strange that a country without coal or ores, without a coast line or navigable rivers, and almost hemmed in by mountains should become a manufacturing nation? This is made possible, in part, by establishing schools where trades can be learned and where new methods can be devised.

Zurich is the largest city and most important manufacturing center of Switzerland. But Basle is also important. It reaches to the north and gathers in the manufactured German and French goods and ships them over the St. Gothard Railroad to Italy. Skilled workmen make useful machinery and keep the many factories busy. Basle also draws to itself students for its university, which is the oldest in all Switzerland.

Besides the industrial cities, there are other interesting cities located in the valley of Switzerland. Lucerne, on a lake by the same name, and at the foot of snow-topped

mountains, has a quaint charm all its own. It is one of the most popular resorts for art students and tourists. And it has an exhibit which is particularly interesting to geologists. This exhibit is a glacial garden in which many pot-holes have been preserved. These pot-holes were made by the water which issued from glaciers. The motion of the water

Courtesy Swiss Federal Railways

FIG. 60. Switzerland. Berne, the capital, is famous for its old-world charm. It has many quaint fountain statues. The most interesting sights are frequently seen around these fountains, many of which are still used by busy housewives on washday.

in a hole kept a stone whirling around and as the stone whirled it wore the hole larger and larger. Today you can see a small stream of water going through one of these holes and whirling a stone about. Another interesting object in Lucerne is the sculptured lion by Thorwaldsen. It is carved in the face of a rocky cliff. Although dying, the lion grasps the lilies of France in his paw. This commemorates the bravery of the Swiss guards who defended

the French king and queen during the French Revolution and died fulfilling their duty. For many years Swiss guards were found at every court of Europe. Today they are one of the interesting sights at the Vatican in Rome.

Interlaken is a charming little city which, as its name indicates, lies on a delta between two lakes which were once one lake. An ancient legend tells us that the patient monks carried dirt by the basket-full and built a place for their village. Our geologists tell us that the stream which flows from the southern mountains carried the sediment from the mountains and built a delta which cut the large lake into two smaller lakes. As this river carried more and more material down, it cut a great valley. As one looks southward through this valley, one sees one of Switzerland's most famous peaks. It is the Jungfrau. Its sides are covered with pure snow. In daytime it rises in solid grandeur. In the bright moonlight its white summit rises like a dim and distant ghost.

Geneva has been the center of two great world movements. It was here that Henri Durant founded the Red Cross in the latter part of the eighteenth century. Geneva has recently taken on a new interest, for it is the home of the League of Nations.

Berne, the capital of Switzerland, and all these other large cities lie in the one large valley between the Jura Mountains and the Alps. How many reasons can you give to explain why the cities developed in that valley instead of in the mountain areas?

Italy entered the war on the side of Germany. - June 15, 1940

Chapter VI

THE ROMANCE COUNTRIES

ITALY

South of Switzerland and Austria lies Italy. The northern part of Italy lies in the snow-capped mountain peaks of the Alps. Its southern tip reaches out into the Mediterranean toward sunny Sicily. Part of Italy is like the Alpine countries at the north; part of it has the sunny climate of the Mediterranean lands.

The Alpine peaks, towering high along the northern boundary, seem to guard the sunny peninsula, protecting it from northern climates and peoples. For generations the people from the Italian peninsula have drifted northward through the mountain passes, and Northerners have been lured over the rugged mountains to the southern slopes.

We will enter Italy along the route taken by many of those Northerners. The Brenner Pass connects the Austria and the Italy of today. It is that route over which many of the German people went southward. They traveled down the valley of the Adige River. Today many of their descendants live in the charming old city of Meran, in southern Tirol.

Here, in a picturesque garden spot, at the crossroads of three of the southern valleys, the city of Meran, a pleasant little German town, is situated. The air is warm and soft and the deep blue sky is characteristic of Italy. Vineyards and orchards cover the lower part of the valley, and high upon the hills are olive and chestnut trees. The fruits and

flowers growing here are among the most famous of all Europe. The fruit is so precious that when the ripening time draws near each apple, peach, and pear is put into a little white bag so that neither insects nor rain can harm it. In autumn the vineyards are the center of

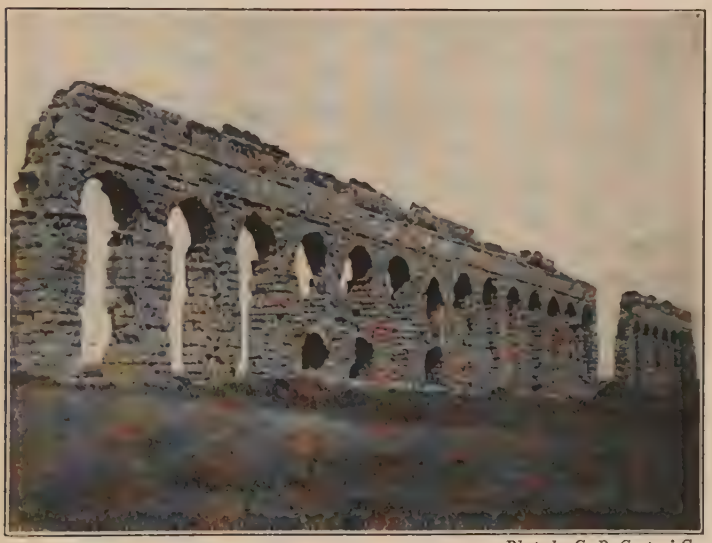

Photo by C. P. Cartoni Co.

FIG. 61. Italy. Ruins of the aqueduct which was built in the first century B. C. to carry water from the mountains to Rome. A broken line of arches about ten miles long still stands on the Campagna.

interest. The salters, guardians of the vineyards, are chosen from the strongest and most honest men in the village. Their costumes are very gay, with short trousers and jackets of black leather. Their red or green waistcoats add color to the landscape. Their three-cornered hats are trimmed with fox-tails and have crowns made of feathers taken from many kinds of birds. These salters are armed only with old-fashioned weapons, since their most

difficult work is arresting harmless foreigners who jestingly pay for the grapes they have eaten by proffering a penny for tobacco.

Some of the prettiest of the Tirolese costumes are seen in this region. The men have brown jackets with red facings, red waistcoats with black belts embroidered in white, black leather trousers, white stockings, and heavy shoes. If a man is married his hat is black felt; if he is single it is green. The women wear reddish brown woolen skirts, white blouses, red-bordered waists, and red stockings, and silk handkerchiefs of the brightest colors are tied around their necks. These picturesque native costumes, however, are seen only on holidays and are rapidly disappearing, as are all the native costumes of Europe.

An hour's journey by rail southward from Meran will bring one to the rich commercial town of Bozen on the Adige River. Not only did a great merchant route of the Middle Ages run through the valley of the Adige but the new road and the railroad run along the river, too. The old road along the mountain slopes is also to be seen. Beside the old road are many peasant houses with high doors and big courtyards. In olden days these were used as inns for the journeying merchants, and their large courtyards protected the loaded wagons.

Here we are still in the region of the Alps. Wild, rugged, bare mountains called the Dolomites lie northeast of Bozen near the Austrian boundary line. Between the towering peaks are deep ravines. A legend says that in former times a wonderful garden of roses covered these mountains. It belonged to the king of dwarfs. He was so disappointed by the ungratefulness of mankind that he changed the blooming garden into a stony wilderness. Sometimes, soon after sunset, the roses in this wild garden begin again to bloom. The white rocks change first into yellow, then into pink, then into red. Suddenly, they

glow in deep purple and violet. This is the "Alpine glow" which is more beautiful seen from Bozen than from any other place and gives the name of Rosegarden to the chain of mountains. In these charming surroundings, Bozen is not only attractive to tourists but is also the chief commercial city for the Tirol.

Approaching the Rosegarden, we go over beautiful "alm" meadows with hundreds and hundreds of little huts and

hay barns. After many hours of walking we reach the mountains. In one of the near-by valleys, fine wood carving is done by the natives, who travel to many parts of the world to sell their wares. In another of the Italian valleys in the Dolomites, mosaic-work and filigree are typical products. Each valley has its own characteristics and its own charm. No matter how far these people roam, many wander back to their Tirolean homes for their old age.

Traveling southward from Bozen one hears less German spoken and more Italian. Pretty flat-roofed Italian houses are seen on every side. Soon one reaches the Italian-speaking city of Trent. Old medieval palaces and a large Italian cathedral remind one of Venice and Verona. The statue of Dante, the great Italian poet of the Middle Ages, stands in an important part of this busy town. Here all is truly Italian.

A little farther south, near the foot of the Alps, a series of long, narrow lakes encircles the mountains as the Swiss lakes encircle the mountains at the north. These Italian lakes join the mountains with the plain. At a distance to their north is the ever melting snow; at their south lies the plain of the Po Valley. It seems as if nature had wisely placed these lakes about the Alps in order to mirror the snow-capped mountain peaks and give the peaks a double beauty. Lakes Maggiore, Como, and Garda are three of the most lovely Italian lakes. This lake region is the Italy of song and legend.

These lakes are surrounded by abundant vegetation. The fig, walnut, and chestnut trees stand beside the small fields of grain. Wild grapevines grow along the roadside, and, as they reach from tree to tree, make an arch over the roadway. The crocuses and lilies of the valley spring up in the shade of the shrubbery. The primrose and the violet scent the air with their fragrance. Pink and gray

palaces peep out from among the trees. Arbored walks tempt one into the midst of beautiful Italian gardens. Marble steps lead from the palaces and villas to the lakes. Boats gay with bright-colored awnings and cushions float at the shore waiting for passengers. Other boats with their bright flags streaming in the wind steam and sail across the lake.

Leaving the Italian lake district, one leaves the Alps Mountains behind. South of the Alps lies the great level plain of the Po Valley, which is hemmed in on three sides by mountains. The Alps circle around the western end of the plain and join the Apennine Mountains which border it along the south.

This great plain was once an arm of the Adriatic Sea. For ages the many streams from the Alps and the Apennines have carried rich sediment from the weathering surface of the mountains. Age after age these rivers have deposited this sediment in the Po Valley and have built up the fertile plain. They are still carrying great loads of rich soil down from the mountains and depositing it along their river beds and in the Adriatic Sea. In many places the bed of the Po has been so raised by the depositing of sediment that it is now above the plain and dikes are necessary to control the flow of the stream. The Po is also building a delta at its mouth. In the last 600 years the Po delta has increased almost two hundred square miles in size. These delta plains have been the home of man for 3000 years and probably for very much longer. Many towns which were built on the shore of the Adriatic are now many miles inland. Today, the shore is bordered by lagoons and marshes. As more sediment is brought down the lagoons and marshes will become dry land and new lagoons will be formed farther out in the Adriatic.

The sediment deposited by the many tributaries from the Alps has pushed the Po River toward the southern

part of the plain. Therefore most of this plain has a gentle southern slope.

This plain is the site today of Italy's greatest industrial cities and is her richest agricultural region. Where once there were great forests and marshes, there are now large fields of wheat and smaller fields of corn and oats. Agriculture is the most important industry of Italy and wheat is her most important agricultural product. However, her demand for wheat is far greater than her production, so much must be imported from Russia or from the United States. Most of the wheat is made up into macaroni, very important in the food of the Italians. Wheat and corn are not limited to the Po Valley but are found in many parts of the peninsula.

The vine is the nearest rival to wheat in importance, for wheat and grapes occupy equally large areas in Italy. Grapes are raised on the hillsides, where most other crops would not grow. Italy was once called by a name which meant the "land of wine," for vineyards are found from the foothills of the Alps to the southern tip of the peninsula. As harvest time approaches, everyone is busy guarding the vineyards from thieves and making barrels and vats. On a bright fall morning, after the dew has disappeared from the vines, they begin to gather the bunches of grapes. Everyone is busy and excited until the juice has been pressed or stamped out of all the grapes. Then the vats full of juice are left in dark cellars, where the juice ferments and forms wine. The Italians become so skillful in raising grapes that when they leave Italy and go to new countries they often plant large vineyards there, as they have in the United States, in Southern Brazil, and in Argentina.

There are other important crops in the Po Valley besides wheat and corn. The hot summers, abundant rains, fertile soil, and energetic people make the Po Valley a

beautiful garden for many months during the year. In the lower land much of the area is in rice fields. Several fodder crops are raised each year in other sections and there is much dairying. Orchards and gardens flourish. The winter cold, however, is too severe for oranges, lemons, and olives. So the people of this valley must secure their citrus fruits from the sunny, well-protected slopes and from southern Italy.

The mulberry tree is very important in the Po Valley and in much of northern and central Italy. No other leaves will really satisfy the hungry silkworm. Of all the home industries, the raising of silkworms is most important. Italy comes next to Japan in the quantity of raw silk produced but ranks first in quality. The work in this industry is done largely by women and children, who are kept busy feeding the silkworms. It has been estimated that the silkworms which hatch from one ounce of eggs eat, in their short lifetime, 30,000 ounces of leaves. Do you wonder that it is difficult for the workers to find time to sleep during the days just before the worms begin to spin? Italy is one of the most densely populated countries in Europe. How does that help in the raising of silkworms? Large quantities of raw silk produced in Italy are exported.

You have seen that the Po Valley is a rich agricultural region. It is also the site of Italy's great industrial centers. The largest and most important cities of the Po Valley are located at the outlets of those mountain valleys which are important routes of travel to the plain. Milan, Turin, Verona, and Bologna, each stands guard over some pass leading northward or southward from the valley. Roads and railroads follow the foothills and join the many smaller cities of the plain with the great commercial centers.

Milan is the largest and most important city of the Po Valley. Even in ancient Roman times it was a great trad-

ing center. There the Roman merchants met the traders from beyond the Alps. There the roads from several of the mountain passes met. Today railroads from the north, south, east, and west meet at Milan. Great tunnels connect it with Switzerland and the northern countries. Other tunnels furnish an easy route between it and the port of Genoa. Although adorned with many beautiful old monuments, a wonderful cathedral, and well-known picture galleries, Milan is, on the whole, a modern town. It is the greatest industrial city of Italy and the center of silk spinning and weaving. This industry is increasing in importance and the city now rivals Lyon in silk manufacturing.

Large manufactures have developed in Italy only during recent years. She has little coal, iron, or petroleum upon which to depend. Nevertheless, Milan, Turin, and many other cities of northern Italy are now operating many factories. Coal and iron are imported from England and even from the United States. Water power is being developed, but several times the amount now used is waiting to be harnessed. Already several of the railways of northern Italy, as of Switzerland, are electrified. Electric power is used in the important iron and steel industries as well as in the textile industries.

Genoa is not in the Po Valley but is the western port for the great industrial centers of the valley, while Venice is the eastern port. During the Middle Ages Genoa was a rival of Venice and constant warfare went on between the two cities. Although Genoa did not rise so high as Venice in those days, she was a mighty city. She protected the shores both to her right and to her left, and a great number of charming little villages and towns owed their early safety to the Genoese fleet. On these shores which Genoa once policed are picturesque villages and splendid winter resorts. They hang like white bird-nests on the mountain

slopes or are nestled on the inner curves of little bays. The blue Mediterranean lies in front of them. Pines and cedars dot the headlands behind them. Tiny streams from the narrow valleys flow past them to the sea. Here the winter has lost its danger, for the mountains protect the coast from the cold north winds. Violets bloom in December and many of the native gardeners raise flowers for the high-priced markets of Paris, London, and Rome. Do you wonder that many tourists spend their winters along this coast and along the neighboring coast of France?

Genoa is situated on the mountain slopes which border the shore. Steep streets lead from the bay up the hills. One house rises above another. Most of the forests which once covered the hillsides have been cut, but an old fortress still looks down from almost every hill. Olive trees, orange and lemon trees, and palms surround Genoa and edge their way into the gardens within the city. On the outskirts of the town one sees many villas, some pink, some yellow, and some gray, which nestle in bright spots against a background of green. Genoa was a wealthy town in the Middle Ages and her beautiful palaces speak of her ancient wealth. Some of these old palaces are now fittingly used as museums. Others are used for banks, and some even by steamship companies. Although descendants of many of the old families still live in Genoa, the masters of the city are the rich merchants, ship owners, and manufacturers who carry on the industry of modern times. Genoa, like Milan, has many cotton, woolen, and silk factories. Her excellent harbor is busy importing coal and raw products and exporting her goods. Her shipyards are busy building boats for her growing trade. Also, one sees along the shores hundreds of fishermen leaving the wharves to fish in the Mediterranean Sea or to search for coral along the Sardinian shore.

Venice, the eastern gateway to the Po Valley, is the most

interesting city of northern Italy; in fact, many say it is the most interesting city in the world. It is located on one hundred twenty islands in one of the lagoons along the shore. Do you wonder why the early settlers chose that location for their home? More than one thousand years ago the barbarians from the north crossed the Alps and invaded the plains of the Po Valley. In order to escape, some of the inhabitants fled before the conquerors and found refuge on these islands. Trading became their chief occupation and they prospered. The city grew so rapidly in population that the Venetians soon found that there was too little firm ground for their homes. Then they put cedar piles out in the shallow water and on these piles built their houses. As the town grew in size and wealth the old buildings were torn down and magnificent palaces were erected on the old foundations.

The old Venetians had to sail the seas to get their food and other necessary products. They became accustomed to the sea, and in the Middle Ages Venice became the most important commercial center of Europe. She carried the goods of all Europe, and when others attempted to get her commerce away from her she overcame them by armed force. The products of the East were carried by caravans to Mediterranean ports. From there they were carried by Venetian boats to the rapidly growing city of Venice. Here the people of Asia, Africa, and Europe met. All that was precious and beautiful was brought to the Venetian markets. Some of the goods were sent across the Alps and down the Rhine to the Netherlands, which was at that time the greatest commercial center in the north. Other goods were sent to northern Europe by way of Gibraltar in the proud sailing vessels of the Venetians. The wealth and the art of the known world poured into Venice and much remained there. Merchants from all Europe bought their spices, perfumes silks, and other precious

wares in the Venetian markets. The German merchants had their own guildhall in which they transacted business; the Turks had their guildhall. Both halls stand today on what is known as the Grand Canal and remind all who float past of the days when Venice was "mistress of the seas" as well as of the Mediterranean. The Rialto Bridge still crosses the Grand Canal and its double row of shops reminds one that it was the center of all this business and wealth.

Once Venice occupied first place in all Europe. Now she ranks only tenth in size within Italy. Let us see why this is so. The caravan routes from the east were dangerous ones, for Turkish hordes often plundered the caravans and murdered the traders. So when the new route around the Cape of Good Hope was discovered, goods were shipped to Europe by that safer all-water route. The Suez Canal had not been built. Venice was no longer on the line of travel, and Lisbon became the trading center. What effect did the discovery of America have upon the growth of the Atlantic ports of Europe? What effect did it have on the growth of Venice?

Venice still has much of the charm of the Middle Ages. Today the railroad train takes one from the mainland across the lagoon to the city of Venice by means of a causeway more than two miles long. The train enters the modern railroad station at the head of the Grand Canal. Numerous gondolas and a few small steamers lie at the foot of the marble steps waiting to take the passengers to their homes or boarding places. If the weather is pleasant, most of the people enter the gondolas and are soon gliding gently toward their homes. The gondoliers call gaily to their passing friends. Now one is really in the heart of Venice.

On both sides of the Grand Canal are many old marble palaces, whose stately walls are quietly lapped by the waves.

A few of these palaces are still used as residences. Most of them, however, are now used as hotels, boarding-houses, apartment houses, and warehouses. One sees barges loaded with raw materials delivering their goods at factories which were once the residences of wealthy Venetian families. In front of some of these old palaces one sees gaily painted poles rising from the water. They look like barber poles but they are really "hitching posts" for the gondolas.

Along the Grand Canal are also many beautiful churches. Some are reached by flights of stone steps which lead from the water's edge. Some are separated from the canal by a narrow pavement. How do people go to church in Venice?

As one travels along, one notices that the walls of some of the old palaces are out of plumb. And is it any wonder, for 16,000 of the buildings of Venice rest on piles.

The Grand Canal, two hundred thirty feet wide and two miles in length, cuts in an S shape through the center of Venice. There are one hundred fifty other canals, but some of them are so narrow that the sky above appears like a slit of blue above the black canal. Almost four hundred bridges cross these canals and most of these are made of stone. Now you understand why there are no wheels in Venice. No, there are no automobiles, no wagons, and even no bicycles. Neither does one see horses; everywhere there are canals and boats. However, one really can go walking in Venice for there are very narrow streets upon many of the islands.

If you were to go out on one of the canals in the early morning, you would see the gondoliers shaking their carpets, beating their cushions, and polishing their gondolas. Later you would see the vegetable boats slipping quietly along, and the women letting down baskets from their windows for their day's supply. You would see other women washing at the edge of the water and many lines of washing

would be flapping from ropes across the canals. You might see a funeral procession gliding quietly along the canal to the island cemetery.

Are you wondering whether Venice is all buildings and canals without parks and gardens? When Venice was under the rule of Napoleon he had many buildings torn down

Courtesy C. H. Handschin

FIG. 62. Italy. Venice. The Doges' Palace as seen from the Grand Canal. Find the cupola of St. Mark's Cathedral in the background.

and a beautiful public park made. Here, one can stroll in the midst of green grass, flowering shrubs, and trees, and almost forget that one is in the island city of Venice.

The rulers of Venice during the days of her great power were called "doges." The Doges' Palace was their residence. It was built in the fourteenth and fifteenth centuries but is still one of the two most interesting buildings in Venice. One enters the Doges' Palace through a doorway surrounded with a framework of carved stone. This

doorway admits one to a short passage which opens into a courtyard. Ahead of one is the marble Stairway of the Giants named from the two large statues of Mars and Neptune. At the top of this stairway all the doges were crowned. The rooms which the rich rulers once used for their residence are now a museum. Here are kept many of the trophies which the Venetians brought back from their wars. In another room there are pictures of all of the doges. A black veil has been painted across one because he was a traitor to his country. Many of the most beautiful paintings in Venice may be seen at the Doges' Palace. You may have heard of the Bridge of Sighs. This bridge leads from the Doges' Palace across a narrow canal to the prisons under which are the underground dungeons. The many prisoners who passed across this bridge probably thought that they were in a passage of the palace, for there are no windows in it. But when they reached the dungeons, they knew that very likely they would never see light again.

St. Mark's Cathedral stands beside the Doges' Palace. This Cathedral represents the wealth of the church eight hundred years ago as the Doges' Palace represents the wealth of the rulers. A law was passed which required each merchant to bring back something from the east to adorn St. Mark's, and so all the known world was searched for treasures to adorn this cathedral. Beautiful mosaics were brought from Constantinople and many other old mosaics adorn the upper walls and ceiling. Four bronze horses seem to prance above the main doorway. Although only bronze horses, they have traveled far. It is probable that they once adorned triumphal arches in ancient Rome, having been brought from Greece. From Rome, Constantine took them to Constantinople when he founded that city. Later Constantinople surrendered them to Venice. Napoleon moved them to Paris but in 1815 the

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FIG 65. Italy. St. Mark's Cathedral and, beyond, a part of the Doges' Palace. Notice the four bronze horses over the door of the Cathedral.

Austrians restored them to Venice. Since then they have adorned St. Mark's except for a short time during the World War, when they were taken from Venice to Rome, as a place of safety. It seems as if each door, each mosaic, each column, each statue, and each painting of St. Mark's has a history all its own.

In front of St. Mark's Cathedral is the Square of St. Mark's. Here during the daytime one stops in the bright sunshine to feed the pigeons. The most beautiful shops in Venice extend along this square and tempt one to enter and buy the famous Venetian-made wares. There are rare brocades and tapestries, exquisite mosaics, laces from a near-by island, the famous Venetian glassware, beautifully colored beads, corals, pearls, and jewelry. In the late afternoon and evening it seems as if all Venice were on this square. Café tables are pushed out to the edge of the square; Italian families and tourists chat over their light refreshments; several bands play the well-known Italian airs.

Venice is more than a charming old city of the Middle Ages with crumbing palaces and dark canals. Its harbor, which was once filled with men-of-war and with the merchant ships of the old Venetian republic, now is filled with many boats from modern countries. The Venetians are proud of the fame of their city and of their ancient industries. They are also eager to watch her modern progress in manufacturing and trade.

Venice has a modern rival in Trieste, not very far away. Italy long has claimed this city and the surrounding region. After the war, by treaty with Britain, France, and Russia, Italy again came into possession of this part of the Adriatic coast. Austria thus lost her chief seaport. Trieste is larger than Venice, has a better harbor, and has good railway communications with the Po Valley and central Europe. Now that Trieste is Italian, she will probably

receive much more of the Italian trade than in the years past. She may rival Venice in industry and commerce, but she cannot compete with Venice in charm and beauty.

As one travels south from the Po Valley one passes interesting old cities. There is beautiful Florence with

Photo by I. H. Green

FIG. 64. Italy. Venice. Above the canal you see the famous Bridge of Sighs which leads from the Doges' Palace to the dungeon. Many prisoners crossed this bridge to die in the dark dungeon.

its many art treasures; Leghorn, the home of the leghorn hat, and many others.

The rich region south of Florence is called Tuscany. It is a real garden. There many of the farmers own their own land or work the land on shares. They try to raise just as much on each acre as possible, and one sees vegetables planted between grapevines, and other crops planted between the olive trees. It is said that each farmer wishes to "eat bread made from his own wheat, drink wine pressed from his own grapes, cover salad with oil pressed from his own olives, and make omelets from his own chickens' eggs."

The hilly regions are carefully cultivated, too. There one sees three crops similar to those in all the hilly sections of Italy. Olives are one of the most interesting crops. In early winter, one may see the patient workers bending over the ground picking up the dark olives or reaching to take them from the trees. One may see the slow but faithful oxen or the donkeys turning the great stone which

Photo by G. R. Ballance

Fig. 65. Italy. In the shade of old olive trees. Olives have long been an important crop in Italy. These trees are old, as you can see. What other industry is represented in the picture?

crushes the olives. In other regions water power is used for the same work.

So much of Italy is rugged that other tree crops must be raised to feed her dense population. The chestnut trees furnish nuts which are sold in the market places and are an important food in Italy. Almonds, walnuts, and pistachio nuts are also cultivated extensively. The mountain regions are also used as pastures for sheep, goats, and cows.

Near Florence there are many small but interesting industries. There are the famous image makers of Lucca, who not only sell their plaster images to the natives and tourists in Italy, but often go to foreign lands to carry on their trade. At Carrara, marble is quarried which is known all over the world for its beauty. Near Florence, one finds the carvers of alabaster making beautiful boxes, ornaments, and statues. In that neighborhood one finds women busily engaged in weaving straw. Each week they can attend the market and buy bundles of straw of different grades. Taking their material home, they sit on their doorsteps and chat with their neighbors as their skillful fingers weave and braid straw.

At Siena and Florence, as well as at Venice, the clever artisans work in wrought iron and turn out artistic gates and garden lanterns, many of which are imitations of the ancient industry. Florence, and Rome and Venice, too, make mosaics. The careful worker puts tiny pieces of enamel, glass, marble, and gold leaf between two plates and makes a picture or flower in beautiful colors. There are many other small industries such as wood carving, the making of papier maché, glass, lace, velvet, and lovely tapestries.

South of this rich region with its old civilization lies the city of Rome. Venice was once mistress of the seas; Rome was once mistress of the known world. One thousand years before the period of greatest splendor in Venice, Rome was ruler of the world.

More than two thousand years ago people lived on the hills which are the site of the Rome of today. A different tribe lived on the top of each hill and each hill was crowned by a village fort. Each tribe tried to make its hill as steep as possible so that no enemy could attack it. In the valleys between the hills there were great marshes. Six miles to the southeast, beyond the prairies and the marsh land,

lay the Mediterranean Sea. In the opposite direction towered the forest-clad Apennines. The Tiber River rose many miles to the north amid the forested mountain peaks. It flowed down to the plain and there circled about among the Roman hills and finally emptied into the sea.

Safe from attacks in their hill homes, away from the dangers of the marsh, and in the sunny climate, all the villages grew and spread and finally became one city.

The tops of the hills were leveled and some of the marshes between the hills were drained. A wall was built around the city and as the city grew a larger wall was built. Six miles away lay the port of Rome at the mouth of the Tiber River. Grain for Rome was shipped through this port from Sicily, Sardinia, and Egypt. From this port Romans went to conquer the known world. Of what advantage was Italy's location to her? Why was Rome not built at the mouth of the Tiber River?

The seafaring boats could not come up the river to Rome. The explanation is a long one. Even in early days the forests in the mountains were cut down. The heavy rainfall in the mountains ran off the slopes very rapidly, as there was little vegetation to hold the water back. As each stream rushed down the slopes it cut a gully into the hillside. The sediment was carried into the Tiber River. When the river reached the plain, it was loaded with silt. Some of the silt was deposited in the river bed, some built up sand-bars, and some was deposited at the mouth of the river. Because of the large amount of silt, the river was too shallow during the dry season for seafaring boats. Today, the old seaport of ancient Rome lies four miles from the sea and the Tiber River is building out the land at the rate of ten feet each year.

You have often heard it said that "all roads lead to Rome." That was certainly true in the few centuries both before and after the birth of Christ. One by one the

Romans conquered the neighboring people and used some of them as slaves to build military roads to all parts of the Roman domain. The roads were probably only gravel at first, but later they were paved with stone. These military roads were built to reach the different parts of Italy; beyond the Adriatic they were continued to Constantinople; they were built along the Danube River; they reached into southern Germany; they were built in Great Britain and in many other regions. Over these roads the Roman legions marched to control troublesome subjects and to conquer new peoples.

The best known of these ancient roads is called the Appian Way. This was built three centuries before Christ. It extended from Rome southeastward to Brindisi, generally going in a straight line even across marshes and mountains. It was paved with six-sided blocks of lava. Near Rome, both sides of the Appian Way were lined with tombs. Portions of the road can still be seen and three of the ancient bridges are still in use.

We do not know exactly how many people lived in ancient Rome, but we do know that it was a very large city, possibly larger than Rome today. It was a great task to supply the city with water. Twelve aqueducts were built to bring water down from the mountains. Part of the way, the water was carried underground by means of tunnels; in other parts, it was carried above ground over great stone arches. Sometimes, one aqueduct was built above another aqueduct for a short distance by putting a second series of arches on top of the lower arches. Some of the aqueducts brought water from a distance of sixty miles and two of these are still in use. In ancient times the water was carried in jars from public fountains to the homes; but today a modern water system distributes water to the newer parts of the town. Rome, however, is still famous for its many fountains.

Much of Rome today is built above the ancient Rome. During the Middle Ages the hills were leveled and the valleys were filled in, until finally some of the valleys were buried under forty feet of débris. Excavations are now going on, and many ruins of beautiful old buildings, monuments, and ancient walls are being brought to light. Today, one sees in Rome the ancient, the medieval, and the modern, side by side. All Italy is a treasure house, for art treasures were brought from all the known world; treasures in ivory, gold, bronze, marble and all other beautiful materials. Rome is even more a treasure house than any other part of Italy, for the wealth of all the world was poured at her feet in ancient times.

As one follows the main street of Rome today one sees modern palaces, large hotels, banks, and elegant shops on both sides of the street. Near them are ruins of an old wall whose stone is black with age. Thus it is that the old and the new are side by side. One is surprised to find smoothly paved streets in many parts of the city, and although many are dark and narrow, some of the main thoroughfares have been widened.

The government has had no easy task to save the beautiful relics of the past and at the same time build a modern city with modern conveniences. It has made many improvements. Two great stone walls have been built along the Tiber River so that in time of high water the lower portion of the city is not flooded. The Tiber River has frequent floods because the forests which used to hold back the water have been cut down. The government has also drained some of the marsh land which lies near the city. This prevents the breeding of mosquitoes and stops the spread of malaria, from which thousands of people die each year. The government is also making excavations, not only in Rome but throughout Italy, in order that we may know more of ancient times; it buys

objects of art in order that they may be kept in the country; it buys famous old buildings and gardens and sets them aside for public care and use. It has installed a new

Courtesy Corriere d'America

FIG. 66. Italy. A common scene on the streets of Rome. At the beginning of winter the chestnut roasters come down from the mountains with their chestnuts. The Romans enjoy the warm chestnuts in the cold season.

water system which serves many portions of the city. In spite of the many things which the government has already accomplished, much more must be done. At present many of the poor people are still huddled together in homes

which are little better than hovels. Why is it more difficult to build a modern city on the site of an ancient one than it is to build one on a new site?

Rome has several hundred churches, many museums, and many art galleries. But if one has only a short time to stay in Rome one can see only a few of the most important places. Most travelers wish to visit the ancient Roman Forum. Formerly, a forum was only an open space which was used as a market place and a place for religious ceremonies, political meetings, and elections. In the days before Christ, the Roman Forum was so used and was the center of Latin life. Finally, it became a political center only and the fishmongers and other venders were driven to other market places. The Forum itself became crowded with beautiful buildings,—temples, courthouses, monuments and memorial arches. Today much of the Roman Forum has been uncovered. Across the street and above it stand modern buildings of modern Rome.

A short distance from the Roman Forum stand the ruins of the Colosseum, built over eighteen hundred years ago. It was used for the contests of gladiators and the fights between wild beasts. It is very probable that it seated as many as 50,000 people. Its outside wall is one hundred sixty feet high. The three lower stories are made of beautiful arches; above the fourth story high masts supported awnings which protected the Romans from the sun. Unfortunately, it has been used as a quarry and much of its stone has been carried away to build beautiful palaces.

On the same side of the Tiber River with the Forum and the Colosseum is the Royal Palace. Palaces, gardens, statues, and fountains all contribute to form a magnificent residence.

Across the river is another famous palace, the Vatican. This is the residence of the Pope, who is the head of the

Photo by P. Cartoni Co

FIG. 67. Italy. Ruins in the Roman Forum. These old buildings were buried under several feet of debris and are now being uncovered.

Roman Catholic Church. This palace now covers thirteen and one-half acres and has more than one thousand rooms. Only one portion is used as the residence of the Pope. Other portions are used for a world-famous library, an Egyptian Museum, an Etruscan Museum, a Roman Museum, many art and picture galleries, and an astronomical observatory. It has so many beautiful statues, paintings, and other works of art that it is one of the greatest treasure houses in all the world. The Vatican gardens are equally famous.

Adjoining the Vatican is St. Peter's, the largest church in the world. It is so large that a choir may be singing in one chapel and not be heard in other parts of the church. Would you like to climb to the top of the dome? There is a spiral stairway between double walls which will take you up where you can get a close view of the mosaics. If you wish, you can climb a ladder and get inside of the ball on top of the dome. As you look down, the people appear like so many flies. When the Pope conducts services in St. Peter's, silver trumpets are sounded from the dome to announce the beginning of the services.

Leaving Rome and traveling southward, one may travel along the Appian Way. On either side one sees a great plain called the Roman Campagna. This plain, green during the winter and spring rains, but yellow and sunburned during the summer drought, is broken only by the high Roman aqueducts which carried and still carry pure water from the mountains to Rome. The Campagna seems to be a picture of perfect solitude. No villages are seen over all the great area. Here and there is a simple stone hut, surrounded by eucalyptus trees, which serves as a refuge for herds and herders. In the late fall the herders come down from the mountains to watch the flocks feeding on the grass which springs up under the winter rain. In June they drive their animals back to the

mountains and the Campagna is almost deserted. Only a few sheep, goats, and cattle, with a few lonely herders, stay on the Campagna in the summer. Much of this area is swampy and malaria prevails. How could this great plain be made into a rich farming section to raise food for Rome?

Traveling still farther south, one reaches the Campagna of Naples, a region famous for its fertility. It is one of the most densely populated areas of Italy. Naples is called "the happy land." The city is situated on the shores of a beautiful crescent-shaped bay overshadowed by the volcano Vesuvius. Of all the Italian skies, that of Naples seems to be the bluest. Of all rich land, the volcanic earth around Naples seems to be the richest. During the summer months when it does not rain, the fine volcanic soil holds the moisture. Water from the mountains is used to irrigate the fertile fields. All year round the land produces one crop after another—grapes, wheat, beans, melons, vegetables, oranges, lemons, figs, and olives.

Naples is the largest city and main seaport of Italy and one of the most densely populated cities in Europe. In many parts of the city one would think that the people lived on the streets instead of in houses. Their crowded quarters seem to furnish room only for the beds, and the people spend most of their waking hours outside. The mothers tend their children on the doorsteps. The macaroni venders and the fruit peddlers often furnish the family meals. A donkey bearing two large baskets filled with vegetables or fruit is seen at every turn. The milkman drives his goat up the stairs and milks it while the housewife waits for the fresh milk. Other men drive the slow cows along and milk them as each customer appears. From an upper story the busy wife lowers a basket for her daily supplies. An old man is seen selling roasted chestnuts. Little children trudge along bearing burdens far too

heavy for them. The mistreated donkey slips and staggers under his heavy load. Across the dark and narrow streets the family washings flop in the air. Dirty water is thrown

FIG. 68. Italy. A street scene in the poorer section of Naples.

from the houses into a street already far from clean. Beggars ask alms from the many tourists.

Although Naples is surrounded by a rich country, there is more poverty there than in any other part of Italy. In Naples the saying is that a melon gives both food and drink. The more prosperous add macaroni and fish to their diet and live comfortably in the healthy climate. The pov-

erty in southern Italy is due mainly to the fact that the land is held in large estates and much is not used to the best advantage. Few of the peasants own and cultivate their own land. Then, too, great tracts of the land are marshy,

FIG. 69. Italy. A scene in Naples. The poorer women of Naples perform many of their household duties in the streets. Here they are doing their family washing at the public fountain. Why do the people of Naples spend so much time on the streets?

so that they cannot be cultivated. The marshes breed mosquitoes which carry malaria, so there is much sickness and many deaths among the people. In those parts where the land is held in small tracts one sees abundant crops. But many of the peasants who cannot make a comfortable living on the large estates go to Naples in the hope that they will be more fortunate there.

This large population furnishes Naples with a large amount of cheap labor, and, while the Neapolitans are poor, they are clever. For centuries these people have been trained to do handwork in their home industries. Now, that knowledge is used in their many large factories. There is abundant water power, and as the water is very pure it is valuable in the textile industry. Cotton, wool, silk, and hemp factories are numerous. Smaller factories manufacture gloves and perfume; larger ones turn out locomotives and steel cars. The shipyards build ships to carry part of the commerce of the port.

In the outskirts of Naples are many beautiful homes, and villas dot the hills along the sea. The drives around the bay are among the famous drives of the world.

From all parts of Naples one can see the volcano of Vesuvius. It seems quite peaceful today, but one can never know how long it will continue that way. About 1900 years ago it suddenly became very active and two prosperous towns were buried under its cinders and ashes. These towns were Pompeii and Herculaneum. The eruption occurred so quickly that the people had no time to flee or to carry away their goods. The ashes covered the laborer at his work, the mother with her children, and the cook preparing her meal. All were killed in the midst of everyday life. Now these ancient cities are being unearthed, and show us old Roman life of those days. Although there have been eruptions since, the brown slopes of Vesuvius are covered halfway to the summit with pretty vineyards and orchards, but the artillery-like explosions give warning that Vesuvius is not extinct.

Naples, Rome, and Venice all have their ancient charm as well as their modern activities. There is perhaps no other land in all the world whose name stands for so much of ancient history, art, and interest, as the name of Italy. All Italians are proud of the greatness of their ancestors

Courtesy Corriere d' Amerika

FIG. 70. Italy. The part of the city of Pompeii that has been excavated shows much about life in these early days. This picture shows one of the main streets, with its stores, fountain, and painted porticoes.

and the history of their land; they also wish to make a future history of their own. Today there is in Italy a large group of industrious people eager to live and build up a great modern nation, aided by the memory of their glorious past.

Germans entered Paris June 18, 1940

FRANCE

France is an agricultural country and about one-half of its people make their living by working their own farms. One of the most important farming regions of France is in the northern part and is called Normandy. Locate that northern lowland corner, for we shall visit that part of France first.

We drive along the smooth, hard roads which are common in rural France. In some places the road is bordered by tall shade trees and in others by a row of low fruit trees. If it is spring you might well think you are in fairy land, for then all the fruit trees are in blossom. There are many apple orchards covered with their pretty pink blossoms. Possibly you wish that you might visit northern France in the fall when the apples are being harvested. Then many of the apples are made into cider. Northern France is too cold for growing grapes for wine, which is the common drink of most of the French. So the people there grow many apple trees, which are not killed by the colder climate. In that region cider has been the drink of the common people for many generations.

You see many other fruit trees. There are peach trees with their deep pink flowers and there are many pear trees also. But there are many other important crops. Here there are truck farms and there they are raising large quantities of sugar beets.

Your drive takes you past many fields of growing grain. There are fields of oats which thrive well in the cool and damp climate of northern France. And there are also

© *Georges Fairraz, Chamonix*

FIG. 71. France. The village of Chamonix lies at the foot of the Alps on the eastern border of France. It is a favorite resort in winter and in summer. Notice that the mountains extend above the timber line. A cloud encircles the mountains.

fields of wheat. You notice that the land is divided into very small tracts. Most of the farmers of France own from twenty to forty acres each. Often a farm is not in one piece, but is made of several strips which are separated from each other. As a rule each strip is marked only by corner stones, as the land is too valuable to be occupied by numberless fences or hedges.

As you drive past, you see men, women, and children at work in the fields. Frequently there are no houses on the farms, as in the United States. You ask where the families of the farmers live and are told that they live in villages. You ask to stop at the next village. It is very much like the other villages through which you have passed. All seems so old, as if it were built many, many years ago. And you learn that it really was built several centuries ago. In those days the farmers went to cultivate their land in the daytime, but at night it was not safe for them to remain in the fields. So they and their families went to little walled towns for safety during the night. And within the villages they built their homes and the stables for sheltering their animals. So the farmers became accustomed to living in villages and most of them prefer to live that way today, although they would be perfectly safe on their land. Many of the villages were built in those early days and so it is no wonder that the village appears very old to you. It seems to be a group of buildings without gardens or lawns. The old stone houses, sometimes plastered or white-washed, stand even with the street. One building is built against the next. You walk along the cobblestone street and finally come to an open door. The kindly lady permits you to enter. You glance through the stone corridor which leads through the house, and back of the house, much to your surprise, you see a garden. This garden, like all the others of the village, is surrounded by a high wall and so you could not see it

from the street. Nearest the house is the flower garden and you are permitted to stroll along the graveled paths. You see an old grape vine clinging flat against a sunny wall. There is a peach tree almost half of which has been pruned away so that it, too, seems to lie against the sunny stone. And that strange hedge of apple and pear trees! The trees are planted very close together and then pruned back until they form nothing more than a hedge. But they do not shade the garden and the few fruits that each plant bears are unusually large. There is a vegetable garden, too, and there, in neat rows, the year's supply of many vegetables is growing. Along the back garden wall are chicken coops and rabbit hutches. The peasants of France have little meat to eat except what they raise, and so their chickens and rabbits are most carefully tended. The rabbits are most valuable because they have many young and because they can be fed mostly on scraps from the kitchen. They will eat parsnips, tops of vegetables, and the outer leaves of cabbages. Besides, they welcome every bit of grass that is collected and brought to them. So they furnish cheap meat for the thrifty French families. The French wives are well-known as good housekeepers and after reading what the French produce within their garden walls you are not surprised that the children have rosy cheeks and beautiful teeth.

The life of the French farmers is not so lonely as it would be if they lived on their own land. In the village everyone seems to know about almost everything that happens. There is a town crier who goes around crying the latest bit of village news. The children go to school with all the other children of the village and on Sunday each family meets its neighbors at church. On her wash-day, each woman takes her boiler filled with her washing, collects her soap, paddle, and scrubbing brush, and goes to the public wash place. There, with her skirts pinned up, she

kneels in a box of straw and washes her things in the public pool. And while she is at work she is chatting with other women.

Life in the village is very sociable and it is also very helpful. Rarely does the village housewife bake her own bread. Instead, a village "bakeress" makes it for all the families and saves the other women the work as well as the fuel for heating the oven. At the same time the bakeress makes her own living. There are other cooks who make their living by preparing other articles of food for all the village. And sometimes there is an old woman who runs a village bath. There is a public fountain too, and there the children and the old women go with their pails to get water.

As most of the people of the village make their living by farming, you can see them start out in the morning. At about sunrise the farmers enter the stables adjoining their houses. There they harness their horses, many of which are very beautiful, for northern France is well known for its draft horses. Then they set out for their land, and you hear their two-wheeled carts rattling over the cobblestone streets. The family work in the field all day and at sunset return with their horses to the village. Most of the dairy farmers live on the outskirts of the village where they can have ample room for stabling their cows.

Most of the French peasants are thrifty, and although their income is very small they are proud to save a part of it. Many of them have bought a few government bonds with their savings. Others have hidden their money somewhere about their homes. There is a saying that the peasants pay for the wars of France with their savings which they have hidden away in their stockings.

As you journey southward from Normandy you reach the large lowland area which surrounds the city of Paris. This lowland is called the Paris Basin. This region is

really the granary of France. It produces one-half of all the wheat produced in France, and France is second in importance among the wheat-producing countries of Europe. Only the United States and Russia produce more wheat than France does. France also produces rye in the hilly districts and some corn in the southwestern part. She has excellent farming land and the climate is

FIG. 72. France. On the Seine River. France has many rivers and canals on which thousands of boats ply back and forth. Waterways provide a means of cheap transportation.

well suited to agriculture, so that the country produces almost enough food to supply all of her people.

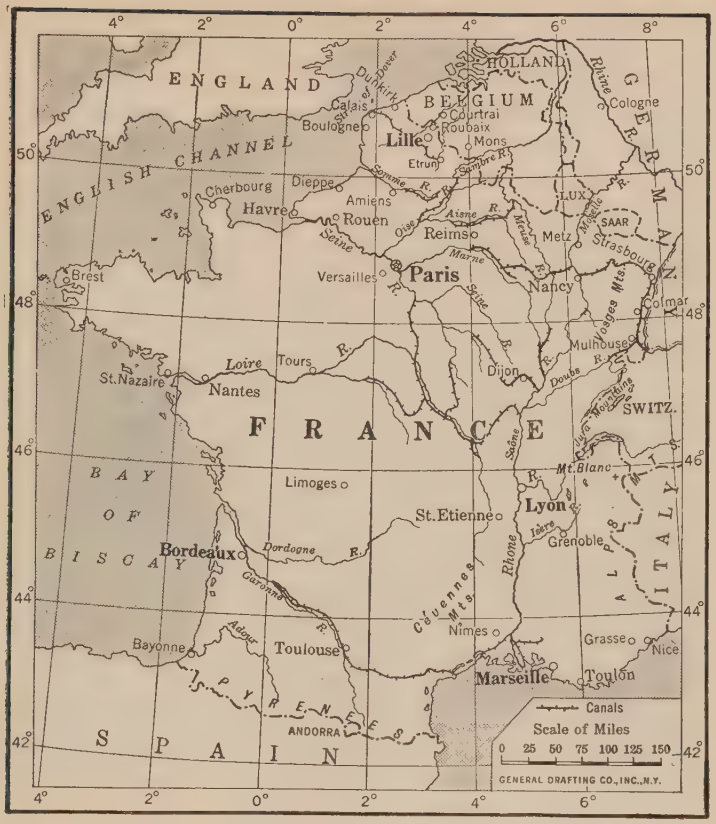
If you look at a map you will find that highlands lie west of the Paris Basin. This region is called Brittany. There the landscape is very different from that seen in the lowlands. Much of this area is bleak and swept by ocean winds. But in the valleys there are rich pastures kept green by the wind-borne moisture. The many streams are shaded by tall trees. Of all the beautiful parts of

France, this part is most beautiful and most loved by the artists. Here the sparkling streams and canals carry the barges back and forth. The simple lock-keepers on the narrow canals pass the barges through the close-fitting locks and then return to their work on the farm. Here and there you spy a cluster of red roofs, but there are few cities in Brittany. Entering a village you see a large crucifix erected to the patron saint. Around the age-old crucifix cluster the few simple homes.

It is said that the cow is queen in Brittany. The cow is, at least, the greatest wealth of that region. The dairy products are sent to Paris and across to the English cities. Would you like to visit one of their cattle fairs? You might have to attend in a mist or possibly in a drizzling rain. But these people of Brittany are accustomed to such weather, and the bargaining and the gossiping go on in spite of it. Pigs and cattle are bought and sold, and at night the farmers return to their small one-roomed houses.

On the lower coast lands of Brittany are many market gardens. This area is warmed by the sea and has an early spring. There the vegetables are ready for market long before those of the colder regions and so get high prices in the Paris markets.

At one time Brittany was higher above the sea than it is now. When it sank, the waters of the sea came into the lower valleys and made many bays along this "drowned coast." Today many fishermen live near these harbors. On each of the protected beaches you see their small sailing boats with their quaint blue fishing nets. Much fishing is done along the coast, and men from some of the fishing villages go as far as the Newfoundland Banks. Sardine and tunny are the principal catches of the fishermen. These fishermen and their sons form the greater part of the navy of France. Their hard life on the sea is the best kind of training for sailing in the navy.



Brittany means little Britain and the inhabitants are called Bretons. These Bretons are descendants of the early Celts who lived in France many centuries ago. When other peoples came into France, the Celts were driven from the lowland areas and took refuge in the rugged and less fertile area of Brittany. There they lived undisturbed by the invaders and became the ancestors of the present Bretons. They are related to the Irish, the Welsh, and the Scotch, who are also descended from

the Celts. But these different peoples have lived apart for so long that each group has its own language. The language of the Bretons is very much like the Welsh language. It is very unlike the French language, and there are many villages in Brittany where little French is heard.

As you travel through France you notice that there are many wooded tracts of land. One-sixth of France is covered by forests and great care is taken to preserve them. All of these wooded tracts are kept very clean, and, as in Germany, even the twigs and chips are tied up in bundles and sold. These forests add very much to the beauty of France. They make the greater part of France look like a beautiful green park with wooded tracts beside the cultivated areas.

Traveling southeast of Brittany one reaches the valley of the Loire River. This is the famous chateau region of France. Most of the chateaux occupy the sites of old Roman camps, but nothing remains of those early Roman days. In the Middle Ages each of the sites became a great military stronghold used partly for defense and partly for residence. The oldest ones have few windows, for those chateaux were built mainly for defense; the later ones were used more as residences. Most of them are beautifully set in the midst of trees. Some of the chateaux are now used as national museums, while others belong to private owners. Still others are in ruins.

As one goes farther toward the south of France the number of vineyards increases. Grapes are one of the chief crops of France and are the crop which many of the French peasants prefer to raise. Grapes have been the chief crop around Bordeaux for more than 200 years. There both soil and climate are well suited to produce an excellent quality of grapes. Bordeaux's chief business is the making, selling, and exporting of wine. There are many cellars, or caves, in the solid rock, in which the

wine is kept to age. In these caves one sees great casks and thousands of bottles of wine arranged on racks. Some of the grapes and wine which are produced along the Mediterranean shores are sent by canal to the market at Bordeaux. Many other wines are also shipped to Bordeaux to be mixed with the wines made there. The quays

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FIG. 73. France. Spraying grapevines with sulphur prevents certain plant diseases. Grapes are one of the most valuable crops of France and so must be tended very carefully.

of Bordeaux are filled with cases and barrels of wine, some coming to Bordeaux and some being exported. France produces more than a barrel of wine for each of her people. She is the most important wine country in the world and Bordeaux is the main wine port.

East of Bordeaux, which lies in the Garonne River Valley, are the central highlands of France. If you will

study your map you will see that many of the important rivers of France rise in this highland area. In this region many of the people make their living by raising cattle and sheep. They raise cattle in the richer valleys, and flocks of sheep find pasture on the drier and less fertile hillsides. In the valleys there are small farms. There, too, many chestnut trees furnish a large crop of nuts which are an important food in many families. On the southwestern edge of the central highlands is a limestone region with many sink holes and caves. Many sheep are raised there and it is this region which produces the famous Roquefort cheese. It is made of sheep's milk and is ripened in the old limestone caves which were once the homes of the early Cave-dwellers.

The port of Bordeaux is connected with the French Mediterranean shore and the Rhone Valley by railroads and by canals. A canal follows the lowland along the Garonne River for many miles. Then it crosses the low divide and reaches the lowland area facing the Mediterranean Sea. There it joins another canal which crosses the lowland to the Rhone River. Before this canal was built, it was necessary for boats from Bordeaux to go all the way around the Iberian Peninsula in order to reach the French Mediterranean ports. Today most of the traffic between these two important areas of France goes by the shorter water route.

France has many other canals which connect all of the important areas of the country with each other. The Rhone Valley is a busy, prosperous region, and so canals have been made uniting it with all the other important regions of France. Besides the canal of which you have just read, other canals connect the Rhone with the Loire, the Seine, the Moselle, and the Rhine. More than three-fourths of the internal trade of France is carried on by means of the many canals and rivers. These waterways have helped to

make Marseille the most important port of France. Goods from all parts of France are shipped to Marseille to be sent to other Mediterranean countries, to the French colonies in Africa, to the Orient, and to North and South America.

The Mediterranean shore of France is called "the land of wine and oil." That part which is west of Marseille is

© *General Navigation Co.*

FIG. 74. France. A boat on the canal joining the Rhone and Rhine rivers. What seems to be the general character of the country through which the canal passes?

mainly the land of wine, for it produces more wine than any other part of France. East of Marseille is the land of the olive tree and flowers, rightly called "the flower garden of the world." It is to this region of the Mediterranean that many people come to spend the winter in sunny, southern France. This famous winter resort of France is called the French Riviera. It extends from Marseille eastward along the Mediterranean coast and joins the equally

beautiful Italian Riviera which extends to the city of Genoa.

Would you like to join the people who come from all parts of the world to spend the winter on the Riviera? The train here winds for many miles among the winter greenery in the land of the olive tree. Their gnarled and fissured trunks tell of the many years in which they have been bearing their fruit. Above the greenery, toward the north you see the snow-capped peaks of the Alps; toward the south stretches the blue Mediterranean. Overhead is a cloudless sky which joins the sea and mountains.

As you approach the towns, the olive trees are replaced by palms which ornament the streets and assure the traveler that the cold north has been left far behind. The train winds into a valley where you see the broad-spreading chestnut trees. Then it nears the sea and passes around the low mountain spur. You pass many orange and lemon groves which add their verdure to the winter's greenness. You wonder how this strip of land along the sea can be so warm and balmy when northern France is cold. If you will look at your map you will notice that the Alps Mountains shelter this region from the cold. Since Nice is in about the same latitude as Montreal, the sun even at noon in winter is low in the southern sky. But its rays strike these southward-facing slopes at nearly a right angle, thus making the land much warmer than it would be if it were flat. The sea, too, helps to keep the Riviera warm. During the winter season the sea gives to the land some of the heat which it has stored up during the summer.

All winter long, flowers are in blossom, and occasional rain storms keep the landscape fresh and green. But it is in early spring that the Riviera is the most beautiful. Then the almond trees are covered with their pale blossoms; the peach trees are beautiful in their dress of pink; the walnut, the apricot, the quince, and the plum add their

beauty. The useful mulberry tree and the crimson-flowered Judas tree add their fragrance and their color. The orange and lemon trees fill the air with their odors, and their fruits are like touches of gold.

Let us travel from the shores of the sea to the center of this "Flower Garden of the World." That center is the

Photo by Gendraud

FIG. 75. France. A peasant's home in southern France. Notice the bed in the far corner and the cradle in front of it. What else can you see?

hill town of Grasse, famous for the manufacture of perfume. In going from Nice to Grasse, one first goes through many olive groves upon the cultivated hillsides. Cork oaks, cedars, and other evergreen trees are seen on the more rugged sections. Small brown villages are perched among the hills. Soon the air is fragrant with the smell of orange blossoms. Then the faint odor of roses is carried through the window. You look out but you see no orange trees or

rose bushes. In a few minutes you reach the plains of Grasse; the orange trees are beside you; the fields of flowers stretch before you.

Now as you travel on you see orange groves for miles around. Women and girls are standing on short ladders, clipping the single blossoms and dropping them into bags hung from their waists. The peasant overseers, in their blue blouses and red sashes, are going from tree to tree. There are scraggly fields of stunted rose bushes covered with buds of all colors. There are dark fields of violets. In the autumn there are gardens of yellow jasmine and beds white with the stalks of the lily-like tuberoses. You pass large flower plantations belonging to the rich distillers of perfume, and beside them you see the small farms of the peasants whose homes dot the hillsides. Instead of small hothouses of pretty blossoms, you see acres and acres of flowers. Many of these flowers are raised for making perfume. Some varieties are sent as cut flowers to Paris.

Grasse nestles in a hollow among the hills. You could follow the narrow, winding streets of the old part of the town, where you would have to step inside a doorway in order to let a wagon pass. You might visit the modern streets of the new part. You could enter the factories, or from a higher point look over the quaint white houses with their lichen-covered roofs and beyond to the flower gardens. The air of Grasse is heavy with the odor of flowers. In the morning the peasant women bring the flowers to the factories. Each balances upon her head a tray heaped with rosebuds or other flowers.

There are many large perfume factories in Grasse and all of them are busy. There are several methods of extracting the perfume from the flowers. In the old process a linen or cotton cloth is saturated with olive oil and then stretched upon a frame. Then the cloth is covered with

© *Leslie Simpson*

FIG. 76. Southern France. France is famous for its excellent roads, many of which are bordered by poplars, as in this picture.

a thin layer of petals and from time to time the petals are changed. As the petals lie on the cloth, the olive oil absorbs their perfume. Then the cloth is put into alcohol which absorbs the perfume from the oil. Today the olive oil of the region is often replaced by lard in the manufacture of perfume. The lard is spread on a glass plate and then covered with petals. In this process the lard absorbs the perfume which in turn is extracted from the lard by alcohol.

The two processes described above are called the cold processes and are used for certain flowers. The so-called hot process is used for roses, orange blossoms, violets, and others. In this process the petals are put into large kettles of hot lard. The petals are soaked in the fat until the mixture becomes cold. Then it is put into a press and forced through a sieve which strains out all the petals and leaves the fat saturated with the perfume which is then extracted as in the cold process.

Roses and orange blossoms are also distilled to make their oils. The oil of oranges is used in the manufacture of all Eau de Cologne for which the German city of Cologne has long been famous. At Grasse, during the season, you see the buyers from Cologne getting their year's supply and often paying as much as $50 a pound for the oil. The oil of roses, called attar of roses, is even more valuable, for it often sells for $200 or $250 per pound and it is sometimes difficult to get at any price.

Only a few kinds of flowers are used in the preparation of the many different kinds of perfumes. In Grasse, the chemists are kept very busy working out new ways of combining the essences to make new perfumes. Perfumes are not always made of flowers only. The skillful chemists unite the flower perfumes with geranium leaves, lavender, spices, and drugs. You cannot tell by the name of a perfume from what it is made, for the name only tells you what its odor is supposed to resemble.

Grasse has another industry which depends upon its flowers. You have all heard of candied fruit. Have you ever had candied flowers? They are made in the same way as candied fruit. Would you like to taste candied violets or rosebuds? These confections, like the bottles of perfume, are wrapped in artistic wrappers or put in attractive boxes for which the French are famous. Many of the pretty packages are imported into the United States.

The flower industries are not the only industries of the Riviera. The region is also the center of the olive trade of all France, and Nice is a well-known olive market. The alcohol used in the perfume industry is also made in the region. It is distilled from the grapes after the juice has been pressed out for wine.

If you were in Nice in the late fall you would be reminded of an Alpine industry. You notice that all of the traffic on one of the main streets is stopped. Then you hear the patter of hundreds of hoofs and soon the street is filled with flocks of sheep. Their shepherds are with them and the shepherd dogs keep the sheep from turning into side streets. You see many thousands of sheep go through the city. The next day the traffic is again stopped for a short time and many more pass through. This happens for several days. Whence do these sheep come? And where are they going? During the summer months the sheep have been grazing in the Alps in southern France, where there is heavier rainfall and where the sheep can find enough to eat. When winter approaches they must leave this region, which will soon be covered with snow. Then they come to feed in the valleys or along the narrow coastal plain where the winter rains produce grass in those pasture lands. Each spring the flocks return to the mountains.

In the summer the Riviera presents a different picture. Then the region is warm and dry. Many of the hotels of the "pleasure cities" are closed and many of the bright-

colored villas which dot the hillsides are deserted except for the servants who take care of the gardens. The tourists have gone northward and the natives now care for the fields and harvest the crops.

This region of mild winters with occasional rains, and of hot, dry summers is said to have a Mediterranean climate and to produce Mediterranean crops. The olive is well suited to the climate for it has small, thick leaves which do not give off water so rapidly as large, thin leaves. So the olive trees can flourish even through the summer drought. Grapevines, too, are well suited to the Mediterranean climate, for they have very long roots which go down many feet in search of water. So they, too, can live through the dry summer. Oranges and lemons also have small, thick leaves but it is necessary to irrigate them at least through the summer drought.

Much of Italy also has a Mediterranean climate. Tell some things which you have read in the chapter on Italy which tell you that its climate is similar to that of southern France. Southern California has a Mediterranean climate too. Can you tell what Mediterranean crops it produces?

Marseille is the most important city of southern France. It is a gay city in which people from all corners of the earth are constantly coming and going. The sun is bright most of the time and the people enjoy spending much of their time out-of-doors. A half million travelers land at this port each year.

The docks of Marseille seem always busy. There you see unloaded many raw products which are used in the industries, especially of the Rhone Valley, but also of other parts of France. And there, too, you see the French manufactured goods being exported to foreign lands.

Besides being a center of commerce, Marseille also has many factories. Its chief industry is the manufacture of soap. At first olive oil, which was produced in the

region, was used in the manufacture of the soap. Now oil seeds are imported from other countries in order to

© *Ewing Galloway*

Fig. 77. France. What is this man making? These shoes are worn in the rural districts.

supply the large number of soap factories with the necessary amount of oil. At Marseille you might also visit two

factories which are run by the French government, a match factory and a tobacco factory. The government does not permit either matches or tobacco to be manufactured outside its own factories, for that is one way in which money is raised to support the French government.

The Rhone Valley, of which Marseille is the port, has always been an important route. When the old Romans were starting out on their conquest of northern Europe, their first route was along the Rhone and the Saône rivers. This was the easiest of the many routes northward. They had settled along the Mediterranean shores on both sides of the mouth of the Rhone River. They had built fortresses and established many cities. In these cities they had built beautiful temples to their favorite gods. Luxurious baths were made for the rich. As they traveled up the Rhone and the Saône, they built other cities along the banks of these rivers.

Today as you travel through this region you are in the midst of Roman ruins, of medieval charm, and of modern industry. If you were to visit Nîmes, you would see there the most important Roman ruins outside of Italy. You could stand in the midst of its old amphitheater and dream of the gay canopies which fluttered above the tiers of seats; you could imagine the crowds of anxious faces watching the gladiatorial combats; or you might think of the poor slaves who toiled so hard to lay one great stone upon another. At Nîmes you might also visit an old Roman temple and see the remains of the Roman aqueduct used to convey the city's water. You could walk along shady boulevards which occupy the site of old fortifications. Most of the cities of the Rhone Valley remind one of Roman days. Lyon was an important center in those days and today it is the most important silk center in the world. If you will look at your map you will see that many Alpine valleys lie to the east of Lyon; to the west

are the hills and valleys of the Cévennes. It is throughout all this region that the mulberry tree flourishes and in the warm sheltered valleys the silkworms are hatched.

Many women and children are kept very busy during the season when the silkworms are being raised. The women pick the young mulberry leaves one by one. Then they take them into rooms filled with tiers of trays on which thousands of silkworms are feeding and scatter the leaves over the trays. The silkworms seem never to stop eating and they tear off the pieces of crisp leaves so rapidly that you hear a rustling noise.

When the silkworms have grown to full size each one spins its cocoon. Then the cocoons are put into hot water and the moths are killed. Few of these cocoons are shipped to the large cities. Most of them are unwound or "reeled off" in factories in the smaller towns of the region. If you were to visit one of these factories you would see many children of your own age sitting in front of the reels, skillfully guiding the slender fibers which are wound into threads. This raw silk is wound into skeins and is then sold to factories in which silk goods are made.

France now produces only a small part of the raw silk which is used in her factories. Most of it is imported from the Orient. The raising of silkworms requires a large amount of careful and patient labor. Because of the dense population in the Orient, labor is much cheaper there than in France. Raw silk is also imported into France from Italy.

Some of the silk is made into silk goods at Lyon but much of it is manufactured in surrounding towns. Most girls would like to visit St. Etienne, for the factories there are famous for their beautiful ribbons.

The silk industry was begun in this region when all of the work was done by hand. At one time nearly every home in Lyon had a hand loom and there the weavers and

their families worked. There are still about 5000 hand looms in the region and on those some of the most beautiful material is made. Now most of the work is done in large factories where one woman can tend several looms, and coal and water power are used to run the machinery. The streams which flow from the Alps and from the Cévennes furnish an abundance of water power. Coal is mined near St. Etienne and it furnishes power for the factories in that region. Coal is also shipped into this region from the mines in the north of France. Excellent canals connect those mines with the city of Lyon and provide cheap transportation for the coal.

About 125 years ago a Frenchman named Joseph Jacquard invented a machine which has been a great help to all the textile industries. Before his time, only simple patterns could be woven by machinery. His invention made it possible to weave elaborately figured goods. Since then, figured goods in silk, cotton, wool, and linen have been woven by means of the Jacquard loom. The French have acquired so much skill in the manufacture of silk that in some lines their goods rival those of all other nations. They are famous for tulles, silk muslins, crepes, chiffons, foulards, and for many other kinds of fancy silks.

There are other industries in the Lyon region which have developed because of the silk industry. Dyes are manufactured and chemists are kept busy making new shades of the different colors. In this the mountain streams of pure water are a great help. Cotton and woolen manufacture has been introduced into this region because of the skilled labor which can be secured. Lyon is also an important center for the manufacture of automobiles, soap, candles, chemicals, and rubber. Did you know that you could buy photographic plates on which you can take pictures in natural colors? The workshops in Lyon, where

the method was discovered and where those plates are made, are among the busiest workshops in all Lyon.

Lyon is the second largest city in France. If you will look at your map you will see why it has always been a very important point. First, it is important because the Rhone-Saône Valley furnishes the only good route connecting the Mediterranean, Africa, and the Orient with northern France. In addition, Lyon lies on one of the main railroad routes between Paris and Italy. It is connected with northern France by the Saône River and excellent canals. It is also connected by railroad with Marseille, the most important port of France.

Lyon is sometimes called a "city of roses." In the outskirts of the town are many rose nurseries surrounded by tile-topped walls. Great quantities of roses are raised and sent to Paris and other large cities. But the nurseries do a more important work than that. The owners spend many years developing new varieties. It is due to their untiring efforts that we have some of our beautiful roses. If you walk between the rows of bushes you wonder how you can describe the colors. Sometimes the inside of the petal is one color; the outside, another. One shade is called shrimp-pink, others coral-red, salmon-pink, crimson-carmine, orange-yellow, velvet-crimson, and flame-pink. You finally decide that describing these roses is almost as difficult as developing new varieties.

To the southeast of Lyon there is a smaller city, but one well known for another industry. That city is Grenoble and it is the most important glove manufacturing city in France. Grenoble is situated in a small but fertile valley in the Alps and is almost surrounded by mountains. From there one can see the snow-crowned, ghostlike peak of Mt. Blanc, the highest peak in all the Alps. Grenoble is located on a swift stream which furnishes water power to run its many factories. In the region around Grenoble,

as in many other Alpine regions, the main industry is the raising of cattle. Here, too, cattle and large numbers of goats are driven up to the high pasture lands for the summer; in the winter they are brought back to the valley floors. From these cattle and goats, hides are obtained for

Photo by Georges Fairraz

FIG. 78. France. A summer scene near the village of Chamonix. The raising of sheep is an important industry in this region. In some parts of France the milk of sheep is used to make cheese.

many of the leather industries. Hides from Switzerland, Italy, and Germany are also imported into this region. For 300 years, one-third of the population of Grenoble has been making gloves and great skill in glove making has been acquired. The factories turn out about 40,000 pairs of gloves every working day. Gloves are also made in many

other parts of France and large numbers of them are exported to the United States.

In the Rhone-Saône Valley, but especially to the north of Lyon, are many mountain slopes which face toward the south. Many of these slopes are covered with great vineyards. The tile-roofed homes of the grape growers cluster at the foot of the slopes.

If you were to travel 250 miles north of Lyon you would come to another important industrial region. This region is in the Moselle Valley, and the factories are centered around the two important towns of Nancy and Metz. Great iron mines lie in this valley. Before the World War, Germany owned a large part of the iron in this region, in fact, three-fourths of her iron was mined there. These are the largest iron mines in Europe. Today France owns all of this iron region. Coal is imported from the Saar Basin, and both Nancy and Metz are centers for great smelters and factories for making iron and steel goods. Both of these towns are ancient, but iron has made them both into large and modern cities. Nancy, the larger of the two, was developed by France; Metz grew up under German rule; both are now in French territory.

The most important industrial area in France is in the northeastern part. Let us see why it is that so much industry is centered there. This region has large beds of coal and the largest French coal mines are located there. You probably know that coal is formed in layers. The layers of coal which are mined in France also extend into Belgium and there furnish the fuel for her great industries. These same layers dip down under the English Channel and come up again in England, where they furnish the power for most of her great factories. Other parts of France have coal, but none have as important mines as those in the northeastern part.

In the early days, flax was raised in this lowland region

as in the part which is now in Belgium. Each home was supplied with a hand loom and each family made its own linen goods. The early inhabitants also bought wool in the surrounding regions and made woolen goods for winter wear. These home industries continued until coal was discovered in that region.

As in many other parts of Europe, these people had through many generations developed great skill in weaving. When machines were introduced that skill was used in factory work. The textile industries had an early start in northeastern France, and they have continued in that region. Today most of the raw materials for the textile factories must be imported. But there are good ports near by and canals connect the ports with the factory towns. Bales of flax and hemp are brought from Russia; jute is brought from India; cotton from the United States; and wool from Argentina and Australia.

There are other important industries in this region, although no other one is so important as the textile industries. Many factories are busy making metal goods, ready-made clothing, shoes, glass, and porcelain ware, and others are busy tanning leather. There are sugar refineries which handle the large beet sugar crop. The city of Lille is the center of all this factory region in northeastern France, but many of the surrounding cities are famous each for some special kind of goods.

Do you wonder where all the people come from who work in the many factories of the region? Northern France is a rich farming country and is densely populated. Many laborers come from the farms and many also come from the densely populated part of Belgium.

Paris is the greatest single manufacturing center in all France in spite of the fact that it has neither raw materials nor fuel. Let us see how Paris grew up and then we shall understand how that came about.

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Fig. 79. France. An airplane view of a village near Paris. What can you see beside the village? Are there any houses on the farms? Where do the farmers live? Notice the roads (white lines) and the strips of cultivated land.

Long before the birth of Christ a tribe of Gallic people settled on an island in the Seine River near its junction with the Marne. There they built their rude mud huts, surrounded by the protecting waters. When the Roman legions of Julius Cæsar came northward they found the descendants of these people. In his writings Cæsar called the settlement Lutetia and the people Parisii. During Roman times the village outgrew the island and spread to both banks of the Seine. By the fourth century the town became known as Parisii, or Paris. In those early days warfare was almost constant and travel was very difficult. But ancient Paris was fortunate in being located in the midst of a very fertile region in which grains could be produced. Then, too, grapes could be raised, and wine made. There were many forests which supplied building material and fuel. In fact, the region was called the land of "corn, wine, and wood." In the midst of this natural wealth the town prospered.

After the Romans, others ruled the region, and Paris remained a seat of government for centuries. Many roads were built from all points of the fertile Paris Basin to Paris. One could travel to Paris by river from all places on the tributaries of the Seine and Marne. Paris became an important trading center as well as a center of government. Finally, it became a center for commerce on the sea, for boats from the North Sea could come up the Seine to Paris in those early days, as ocean boats were then small.

The growth of Paris continued until the present time. The island on which the Gallic tribe had their settlement is still the center of Paris. That island is now called Île de la Cité and beautiful bridges connect it with the mainland. At the present time Paris is the main railroad center for all northern France; many canals have been built between important rivers, and Paris is the natural center of many of these waterways; the Paris Basin is still the

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FIG. 80. France. On this island the rude mud huts of the original settlers of Paris were built. Notice the change from that day to this.

most fertile region in France. Because of all these things many people live in Paris and consequently there are many people to work in the factories.

Many people are attracted to Paris in other ways. It is a great center of art. There are many museums filled with beautiful paintings; there are excellent teachers of art and many go to Paris to study art. It is also a center of science and other branches of learning and that, too, attracts people. Paris is also a beautiful city. It has wide boulevards many of which are bordered by tall trees. It has many parks, and outside the city are many lovely forests. It has artistic opera houses, beautiful theaters, famous churches, many concert halls, gay cafés, shops which tantalize the buyer with pretty wares, and department stores which rival those of the United States. Do you wonder that people from all over the world visit Paris?

These thousands of people who constantly come and go in Paris buy many things. Besides, it is the largest city on the continent of Europe and its own people purchase many articles. Consequently the city itself furnishes a large market for the goods manufactured within the city.

Paris is known for its small factories rather than for its large ones. Like London, it makes not only many small articles necessary for everyday life, but also many articles of luxury. The small factories turn out goods noted for their beauty of design, for their artistic finish, and for their excellent quality. The United States, Germany, Belgium, England, and other countries make large quantities of necessities. The French have always made many goods which we really do not need to have, but which we like to have. They make beautiful tapestries, costly shawls, jewelry and watches of many kinds, fancy bead bags, decorated leather goods, exquisite china, expensive furniture, silk hosiery, stylish hats, and seemingly numberless articles for personal adornment.

There is an old saying that "Everything in France flows into Paris and flows out from it." It is certain that Paris is the most important center of all France and may be said to be the heart of this thrifty, prosperous nation.

IBERIAN PENINSULA

Today people travel from one country to another by steamship, railroad, automobile, airplane, and even dirigible balloon. All of these methods of travel are very recent. For hundreds, even thousands, of years people skirted the coasts in their frail barks, afraid to get outside of the sight of land into the uncharted seas. They trudged behind their stolid oxen, and after days, weeks, or years of travel made a home in a new land. Astride their trusty mules, they carried their families and household goods into regions which looked more tempting than their home land. They traveled over shifting sands in their slow caravans. They rode their half-wild horses across the grassy steppes into new countries.

In those days travel was slow and uncertain; the compass had not been invented; trails, instead of roads, led to new countries; few people knew of maps; most people knew nothing of other lands except what they had been told; wild animals and barbarous men made the routes dangerous; in some places great forests blocked the paths; in other parts extensive swamps and marshes sent travelers many miles out of their way.

Because of these conditions the migrating people spread slowly from their old home regions. They crossed the narrow seas instead of the oceans. They looked for bridges of land instead of starting out across the wide seas. Because the early Phœnicians could skirt the shores of the Mediterranean, they traveled far away from their homes in search of minerals. They visited the Iberian Peninsula

and founded the city of Cadiz as early as 1100 B.C. They went still farther and secured the rare tin from the mines of southern England. Because Greece faced the island-dotted Ægean her people sailed from one island to another and across to Asia Minor, and today Greek settlements are found throughout those regions. Because the Romans could stand on their eastern shores and see the opposite shores of the Adriatic, they went across and conquered that region. Because at a later time the Venetians, too, could see those eastern shores, they sent their ships across to plunder the wealth. In these ways people have spread from one region to another and have become the founders of all the states of today.

Several different groups of people have migrated into the Iberian Peninsula. The earliest known inhabitants of this peninsula were the Iberians, who have given the peninsula their name. Away to the north, in the midst of the eastern Cantabrian Mountains, one finds the Basques today. These Basques are descendants of the Iberians who took refuge in the midst of the high mountains when different invaders entered their land. They still speak their own language, which is wholly unlike the Spanish language.

The Romans were the first great wave of conquering people to spread over the Iberian Peninsula. You have learned that they settled at the mouth of the Rhone River, where they established fortified camps. From that region they traveled northward. They also went overland from there to the Iberian Peninsula. They followed the narrow lowland around the eastern edge of the Pyrenees Mountains, using the same route that is used today by the railroads. Other Romans sailed from Rome and landed at the ports of Iberia. They found this semi-arid Mediterranean country very much like southern Italy. They were accustomed to a land of winter rains and summer drought; they were accustomed to brown hillsides and dry plains.

They soon established towns; they built great aqueducts like those near Rome to carry water from the mountains to the cities; they constructed Roman amphitheaters, forts, and roads. They lived in the peninsula for many centuries and the Spanish and Portuguese languages which are spoken in most of the peninsula today are a result of the Roman days. Those two languages, as the French and Italian, come from the old Roman, or Latin. Can you tell why it is easier for one who speaks French, Italian, or Portuguese to learn the Spanish language than it is for one who does not speak any of those languages?

The next great wave of people which spread over much of the Iberian Peninsula consisted of the Vandals and Goths who came from north of the Pyrenees. They, too, traveled along the low eastern edge of the mountains and spread over Spain. The Goths pushed the Vandals to the southern part where they have left their name in Andalusia (Vandalusia). The Goths settled farther north where they left their name in Catalonia (Gatalonia). These Goths and Vandals intermarried with the Romans and their descendants became the early Spaniards—a race of warriors, conquerors, and adventurers.

The next great wave of migration into the Iberian Peninsula was that of the ancient Moors. As the Iberian Peninsula forms the bridge of land that almost connects Europe and Africa it has been the battleground of two civilizations, Mohammedan and Christian. The Moors came from the northern shores of Africa very early in the eighth century. They spread over the Iberian Peninsula and all the inhabitants paid tribute to them. They crossed the Pyrenees Mountains and finally met their first defeat in France at the famous battle of Tours. Do you wonder who these people were? Some of them were Berbers from northern Africa; some were Arabs from the great deserts; some were Syrians from the eastern shores of the Mediterranean;

but all of them were followers of Mohammed. Many of these Moors were gardeners who had become very skillful in irrigating their desert lands. Some of them were wandering warriors looking for adventure. Some were learned Arabs from Alexandria who brought with them all the ancient knowledge of mathematics, medicine, astronomy, and other sciences. Most of them were men accustomed to the desert trail, the fertile oases, and the nomadic life.

Look at your map and tell why these Moors crossed from Africa into the Iberian Peninsula instead of entering other parts of Europe.

For almost a thousand years the early Christian Spaniards tried to drive the Mohammedan Moors out of their country. Century after century the strife continued. First the Moors were driven from northern Spain; then still farther south. Each century found them driven farther and farther toward Africa. Finally in 1492 the Spaniards captured the Alhambra, the last stronghold of the Moors.

Still the Moors continued to live in southern and eastern Spain, and not until the beginning of the seventeenth century were all the Moors driven out of the country. Then thousands of them were driven from their rich lands and from their homes. They were crowded on to boats and carried back to their old home, Africa. From there, their descendants still look back upon the Spanish shores and dream of the days when they will return to Spain.

Have you wondered what these Moors did all the time they lived in the Iberian Peninsula? While their hired soldiers were fighting the battles, many of the Moors were cultivating the land. They constructed irrigation works in southern and eastern Spain and made the desert places blossom. They introduced sugar-cane and cotton, the orange and the mulberry trees. To replace a poor breed of sheep, they introduced the Merino, famous for its heavy wool. They imported beautiful Arabian horses and also

improved the breed of mules. On the edge of the desert they planted olive trees and grapevines whose long roots adapt them to a semi-arid region. They were the farmers of the Iberian Peninsula, and when they left, the country was without its best farmers. Along the eastern edge, the fight against the desert has been kept up and Moorish methods continue even today. They established schools which were famed throughout the known world. One thousand years ago they had free schools and used globes in teaching geography. Now, in the same place, most of the people cannot read or write.

The Moors were not only excellent farmers and scholars but also world famous architects and builders. Among all their buildings still remaining, the Alhambra ranks first. From the top of a hill, the Alhambra, the last stronghold of the Moorish kings, looks down upon the town of Granada. Its plain walls give no promise of the beauty of the interior. Much of the Alhambra is in ruins and part of it was torn down to make room to build the palace of Charles V. The Alhambra palace today consists of two beautiful courts which are surrounded by low-roofed buildings. In the center of the Court of Myrtles is a large rectangular pond. This is surrounded by carefully trimmed myrtles, and orange and lemon trees add their fragrance and beauty. In the center of the Court of Lions is an alabaster fountain, upheld by twelve marble lions. When the water is turned on, it runs from the mouths of the lions. The Moors were not only lovers of gardens but also of running water. The Alhambra is like a great Moorish museum with delicate mosaics, bright colored tiles, slender columns, and stuccoed lace work.

The second greatest Moorish building in Iberia is the mosque at Cordoba. When it was built there was only one larger mosque and that was at Mecca. More than 1000 columns of jasper, marble, and other beautiful stone sup-

port the arches. Formerly nineteen of these arches opened on to the Court of Oranges and there the Moors washed themselves before entering the mosque. The arches are painted in bands of red and white and look more like the Orient than like Europe. A Christian church has been built in the center of this beautiful mosque and much of the original beauty of the mosque has been destroyed.

Cintra Palace in Portugal is another palace of the Moorish kings. In many other parts of the peninsula they left famous buildings; some are now in ruins and some have been restored by the government.

Because of the thousand years of warfare against the Mohammedans, because of the outlook upon the sea, because Moorish schools fostered a desire to know the world, and because of the natural desire of young people for adventure, the Spanish developed into a race of explorers, conquerers, and adventurers—not a race of farmers. From Palos Bay came Columbus to find the New World. From Seville, Cortez came to conquer Mexico. From the same land, Pizarro sailed to explore parts of South America. From Sanlúcar, at the mouth of the Guadalquivir, Magellan sailed to discover the strait now called by his name. Many other famous explorers went from this warring land. They went in search of precious minerals as many had gone to Spain in earlier years. They either sent gold, silver, and precious stones back to their homeland or returned to it with their valuable cargoes. They did not cultivate the lands they discovered and soon lost their colonies on this account.

This is the background from which has risen the civilizations of Spain and Portugal. From the remnants of these early people have sprung the Spaniards and the Portuguese of today. The conquered Iberians, the industrious Romans, the invading Goths and Vandals, and the cultured Moors,—each group has left its mark.

Civil war ended Apr 1939 SPAIN after 3 yrs. - Franco victorious

Most of Spain is included in the high plateau of the Iberian Peninsula. We shall first visit the central region, the districts of Old and New Castile. This region is wholly unlike most of the United States, but we see many similarities between it and our own Southwest. There is little rainfall, and wherever we look in summer we see a dry, broad, and almost treeless plain. A burning sun looks down from a cloudless deep-blue sky. Its bright light is dazzling to our eyes. The rivers have either completely disappeared or their waters merely trickle along the beds. Many of the springs are dry. In the distance one may see the sharp peaks of the snow-capped mountains. On closer view chestnut and oak trees are seen on the lower mountain slopes and above them the pines and firs. The landscape is so dry and naked that we are almost ready to believe

that "A lark which flies into Castile must carry its food with it." Here and there we smell the fragrant rosemary, lavender, sage, or furze which are able to thrive under the burning sun.

In winter the scene is different. Then light rains fall and green grass soon appears. The sheep and goats which have been grazing in the mountain valleys are seen returning to feed on the green grass of the plain. Cold winds blow and the Castilian crouches in his blanket or long cloak. An old Castilian proverb says that their year is nine months of winter and three months of Hades.

Why do you not find log houses in Castile like those you find in many northern countries? The Castilian uses the materials close at hand and his simple home is generally made of adobe, large bricks of clay which have been dried and hardened in the hot sun. The outside of his house is often unattractive. Beside the door there may be a window or two, but they are never large, for the houses are all built to keep out the cold winter winds. Entering the door, one finds oneself in a hall which during the hot summer is used both as dining and living room. At one side of the hall is the large kitchen with its great fireplace. At each side of the hearth one always finds strong wooden benches. There during the raw days of winter and also during the evenings, the master of the house, his wife, and neighbors sit, spinning and talking. They discuss the village news or tell again some old adventures found in their great poem, "The Cid." On the other side of the hall one finds the parlor and bedrooms, which are usually very dark and without ventilation.

In these homes the floors are made of wood or pretty colored tile. Only the necessary furniture is seen, for the average Castilian is not accustomed to any kind of comfort. On the walls, the housewife proudly displays her assortment of earthen dishes,—pots, pans, plates, cups, all of earthenware and made by some near-by potter

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FIG. 81. Spain. This is a common way of washing clothing in Spain and Portugal The women have a pleasant time chatting as they work.

or possibly by the owner. You must remember that the home just described is the home of a well-to-do Castilian. A poor family often lives in one room with a dirt floor and little furniture.

The Castilian peasant is a herder or a farmer, but the farming is adapted to the long dry summers. Scanty

© *Wunderlich, Madrid*

FIG. 82. Spain. Raising sheep in Castile. This is a typical scene in the arid upland regions of New and Old Castile. The Escorial, an old palace now used as an art museum and the royal burial place, is far in the distance.

crops are raised on large areas which are planted to wheat, barley, and rye. Grains are grown especially in the neighborhood of Valladolid, which region is called the granary of Spain. Chick-peas, lentils, and vetch are also well suited to the climate and form a large part of the peasant's food. The best friends of these peasants are the sheep,

for the farmers drink their milk or make cheese from it, and weave their wool into cloth for clothing.

In this region where making a living is so difficult, even the children have many daily tasks. They feed the cattle, milk and stable them. In the summer they are of great help in harvesting the grain. Modern machinery is used on the large tracts of land, but much of the land is owned in average-sized tracts. There the threshing is done in the old-fashioned way. The threshing barrows, or sledges, with metallic saws or sharp-edged flints on the under side, are drawn over the grain by mules or oxen. The children, wearing wide-brimmed straw hats for protection against the summer heat, jump about on the top of the threshing barrow until all the grain is threshed out. To separate the grain from the straw, the threshed grain is thrown into the air with a pitchfork or winnowing fork. The grain, which is heavy, falls near the worker, while the light straw is carried farther away by the wind.

Of all the family, the Castilian mother has the hardest lot in the midst of work and poverty. Some add to the small family income by making articles for sale. In the steppe regions the mother gathers esparto grass from which she weaves shoes, baskets, and coarse cloth. In other places she gathers hemp for the same purposes, and the making of lace and embroidery are age-old occupations.

Flour, wine, and olive oil are made from local products, but in all of Castile there is no real industrial city.

The dull and dreary life of the Castilian gives way to enjoyment on feast days. These are sure to be celebrated in every town, for every town has its patron saint. After religious services in the morning, the gay procession is seen on its way to the bullfight. In the evening all the young people enjoy themselves in what would seem to us a very serious dance.

All the cities except Madrid have a rustic appearance.

The population of Castile is grouped largely in the ancient cities which flourished in the fifteenth and sixteenth centuries, or in tiny villages separated by great distances. The old cities, like Segovia, Avila, and Toledo, live wrapped in the memories of their glorious past. There one still can see Roman or Gothic cathedrals, which form the centers of the network of very narrow, silent streets. The villages are mere clusters of miserable houses around the main plazas which are the social centers of the villages. There the people sun themselves in the daytime, chat, and make merry in the evening.

In the midst of this semi-arid region is Madrid, the capital of Spain. There the summer days are hot and dry and the hottest hours of the day are spent in rest. Many take a siesta either within their homes or outside in a shady spot. The stores are closed from one to three and the street cars are almost empty during those hours. Later in the afternoon the shops are opened; the people come and go on the streets; and venders are seen walking slowly beside their burros. The evenings, too, are warm, and many people stay on the streets to keep cool. There is fun and laughter, and on festival occasions an orchestra or band furnishes music for the gay dancers. Even the coolness of the night does not drive all inside. Many of the poor are seen asleep in the parks, on the benches, and in the doorways.

The winter in Madrid is quite different. The middle of the day may be bright and warm, but the night is cold, and people do not care to loiter along the streets. Occasionally there is some snow, and often a cold wind blows from the snow-covered mountains at the north. An old Castilian proverb says of the wind, "It will kill a man when it will not blow out a candle."

The site of Madrid is indeed unsuited for a city. But this location was chosen because it is near the center of

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FIG. 83. Spain. The old city of Avila. This city is an excellent example of a medieval city built for defense upon a rocky elevation and surrounded by a wall with many round towers. The wall still stands, but the town has outgrown it. Notice the barrenness of the surroundings.

Spain. It was thought that the people from the different regions near the sea could reach the capital with equal ease. You can see by your map that many of the valleys lead from the coast toward Madrid. This makes Madrid a natural meeting place for the different routes.

Although in the Middle Ages Madrid was a walled town, there is little today to remind one of the past. Most of the city has a modern appearance but only a few buildings seem to be of special interest. There is, of course, the royal palace, the principal residence of the King of Spain. Near it is the armory, which you would find more interesting. In that building you will find all sorts of weapons, armor, and other instruments of war used in past ages. This collection is considered by some critics the best collection of its kind in the world. Another building contains an excellent collection of paintings, many of which are the work of some of the most famous artists. Madrid is a center of government, learning, and art.

The industries of Madrid help to give the city an air of modern times. In spite of the fact that the city is located in the midst of a desolate plateau, some industries have developed. Most of them supply the things needed in the city, though some manufacture a few articles for export. One of the most important industries is the manufacture of leather goods. Why has that become an important industry here? There are also tanneries which tan hides for the leather industry. Other factories make fans, umbrellas, and sunshades. Why are those needed? Still others make candles and guitars, both of which are used in the daily life of the people. Flour mills, paper mills, and others supply certain needs of the people. The region furnishes few raw products for factories; there are no flourishing cities near by in which manufactured products can be sold; and so Madrid has not become a real industrial city.

Photo by Leslie Simpson

Fig. 14. Spain. In Madrid poor people must carry water from the public fountains to their homes. Why are earthen vessels used?

Along the Guadalquivir River is another arid region of Spain, called Andalusia. It was up this river that the proud galleons of Spain sailed in the days of its glory. Today ocean-going vessels dock at the busy wharves of Seville. As one travels up the river from the sea, one passes through cultivated fields on both banks. There are large fields of wheat, barley, beans, and blue vetch. There are also great vineyards and many olive, orange, fig, pomegranate, and almond orchards. Along the banks of the river one sees many pottery kilns in the little towns, and across the river from Seville are famous pottery shops.

Here, as in Castile, the winter brings rain, but in the summer the crops must be irrigated with water from the mountains. The winter climate is mild and temperate and seems almost ideal, but the summer is much hotter than in Castile. In the great Andalusian cities of Cordoba and Seville, awnings are sometimes stretched across the street from roof to roof to lessen the heat and light of the sun. The Andalusians wear broad-brimmed hats for the same reason. From the days of the Moors, the streets in most of Spain have been built very narrow and winding. The narrowness of the streets is also a great protection from the sun. Spring is their most delightful season. It commences very early, and by April and May the fields are covered with a carpet of bright flowers.

In Andalusia one finds a denser population than in Castile. The wide and rich flood plains in the valleys are irrigated with water brought down from the mountains. They are cultivated intensively, while most of Castile is sown to grains. In intensive cultivation, food and work are furnished for more people. Here we do not see many tiny villages, but instead the population is grouped in cities of 20,000 or 30,000 people. In spite of their number, most of the inhabitants are farmers who make their living working on the land. Few own their own land, and the major-

ity are very poor indeed. During the rainy season when the peasant cannot work in the fields, and during the time when the crops demand no care, the father of the family

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FIG. 85. Spain. The Street of Serpents, the main business street of Seville, so called because of its many windings. Awnings are drawn over the street during the daytime because of the intense heat and light of the sun. Notice the broad-brimmed hats worn by the men for the same reason.

is without work and without an income. Then, wrapped in his cape if it is winter, he takes his place in the plaza. He waits, patiently and silently, beside many other workers like himself, for an opportunity to hire out. There are so many laborers and so little work that when the manager of a large estate comes for workmen, he is able to hire them for a very small daily wage. Only in some parts of the year is the father certain of work—during the sowing season in autumn; during the olive harvest in December and January; during the weeding of the fields in March; and during the grain harvest from June to August. Even the young children work and earn a little, especially during the olive harvests. The mother, here, as in Castile, attends to her household duties and helps her husband in the fields.

Because Andalusia is a land of large estates it is a land of very rich and very poor. The houses of the rich are attractive and very different from those seen in Castile, for in Andalusia the Moorish influence is strongest. One enters a home of the wealthy through a large entryway or hall at the back of which is generally a glass door of many small panes. This opens into the typical court or patio. In the center of the patio is a running fountain which sprays the cool water in all directions. Around the edge of the patio are many pots of flowers. This court is the meeting place for the family and friends during the hot hours of the day and evening. There they sit in rocking-chairs and discuss the happenings of the day.

The house of the poor peasant is much smaller. But however poor and wretched the house may be, it is generally painted white and there is a tiny garden or a courtyard decorated with plants, for all Andalusians love flowers. The women and children adorn themselves with flowers and even the poorest have a small pot of them to tend. The geranium, carnation, rose, and sweet basil are among

those most loved. In all Andalusia, the courtyards, the garden walls, and the balconies are gay with flowers. One remembers Seville, Cordoba, and Granada because of the unique penetrating fragrance of their vermilion roses. In

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FIG. 86. Spain. A typical patio in Cordoba. The house is built around the patio, in which running water and green plants help to lessen the heat of the sun. Much of the family life is carried on in the patio and in the shade of the arcades. Notice the bird cages and the balcony with its growing plants. The man who is standing is wearing the broad-brimmed hat common in Cordoba. Why is such a hat so commonly worn?

one's memory, too, is a picture of the Andalusians with their guitars and tambourines decked with colored ribbons, and of the women dancing to the sound of the gay castanets.

We will now take a glimpse of Asturias, a part of Spain in which the rainfall is heavy and quite evenly distributed throughout the year. Asturias is one of the provinces

lying in the Cantabrian Mountains, and extending down to the Bay of Biscay. Now we are in a region very much like other parts of western Europe. The winds coming from the ocean give the region a mild temperature except in the mountains. The frequent rains have caused the mountains to be covered with forests and the valleys with rich grass.

Asturias, like its neighboring provinces, is a region of small landholders. The narrow mountain valleys, always provided with a noisy mountain torrent, make it almost impossible for the land to be held in large estates. For this reason the peasant owns the house in which he lives, the cow that nourishes him, and the fields that feed the cow. Generally, too, he owns the ground where he sows the corn to make his bread, and some hillside where he has an apple orchard to give him his cider in the fall.

We are very far away from Castile and Andalusia. Here there are neither olives, vines, nor wheat. Instead, there are many bright green fields of corn, and the olive and vine are replaced by the apple tree and the chestnut. The hot sun of Castile and Andalusia gives way to cool weather and a cloudy sky. The broad-brimmed hat of those provinces is replaced by a blue woolen cap. The sheep, so numerous on the Castilian plain, are absent, but cattle take their place. It seems as if most of the life of the Asturian peasant is spent in taking care of his cow. He cuts the hay in the summer when the mountain fields are cool and fragrant. During the cold winter, when the fields are entirely covered with snow, the cow is shut up in the stable and eats the hay that her master had the foresight to gather for her. The cow is the capital of the poor man; he drinks her milk and makes butter and cheese from some of it. The Asturian house wife helps in sowing the fields of corn, in cutting and curing the hay, and in storing it away.

In Castile we saw moderate-sized landholdings and small towns widely separated from each other. In Andalusia there were large landholdings and the poor peasants were grouped together in cities. In Asturias and the adjoining provinces is the region of the smallest land holdings. The

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FIG. 87. Spain. A storehouse in Asturias. The Asturian never keeps his crops in his house, but builds high above the ground a wooden storehouse. Here his supplies are kept dry. Why does he place a large flat stone on top of each support?

population is widely distributed over the country. Little Asturian villages have only a few houses. Such villages lie so close together that it sometimes seems that the last house of one village is hardly out of sight before one sees the next village. The larger villages have weekly markets where the inhabitants of the smaller hamlets come to transact their business. There one sees women coming to market with baskets on their heads. These baskets are

interesting, too, for they are made of strips of hazel and chestnut wood. In early summer the baskets are filled with cherries. Later, plums and apples fill them. Then there are ripe hazelnuts and chestnuts. Sometimes the women carry bacon and eggs to market. The Asturian housewife carries everything on her head—the measure full of water from the fountain and the baskets filled with merchandise. They come along the steep and narrow roads, balancing themselves rhythmically to keep the burden from falling.

Since the mountains are covered with great forests of beech, oak, and other trees, the Asturians build their homes of wood. The lower floor has only a hallway and kitchen; the living room and the bedrooms are on the second floor, where they will be less damp in this rainy country. These houses are not so bright and joyful as those of arid Spain. The clear days are fewer than the cloudy and rainy days, and the houses are dull and somber in appearance like the sky.

As you step into the kitchen you see an unfamiliar object. It is a large wooden measure of conical form, with three wide steel hoops which the Asturian housewife polishes most carefully. This is the corn measure, and each housewife tries to have the steel bands of her corn measure brighter than those of her neighbor. There is also the scythe with which the farmer cuts his hay. And see the sabots, or wooden shoes! Who would ever have expected to see wooden shoes in Spain? The sole of the sabot has three clogs on the bottom to raise it out of the mud and rain. Some of the sabots are plain but others are carefully carved. As soon as the rain commences everyone puts on his wooden shoes. The children can even run and jump in them. On rainy Sundays the people who attend church leave their wooden shoes outside, because they would make a noise that would disturb the silence of the church. When the people come out, although

there might be hundreds, each one recognizes his own sabots.

You have always thought of wooden shoes in Holland and bagpipes in Scotland, but Asturias has both of them. Only in Asturias and Galicia does one hear the bagpipe in Spain, but here it is heard in all the villages. On feast

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FIG. 88. Spain. A fisherman of Malaga is having his fishing boat hauled up on the sands. This team of oxen is probably its owner's entire fortune. The western shore of Spain (Galicia) is the most important fishing center of Spain, but Malaga is also the home of many fishermen.

days the drum and bagpipe accompany the merrymakers as they sing.

Along the table-land bordering the sea we find several ports and the largest and busiest cities of this mountain region. The mountains yield coal and iron and as a consequence this has become an important factory district. Santander is a large smelting center and Bilbao has shipbuilding yards. Along this coast, but especially on the western coast, live many fishermen who fish for sardines, tunny, and cod.

There is a second manufacturing region in Spain. It is along the east coast which slopes toward the Mediterranean. Barcelona is the center of this busy section. It has been an important port from very early times. Now its harbor

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FIG. 89. Spain. The Roman aqueduct of Segovia. This ancient aqueduct was built by the Romans and has stood for 2000 years. The great blocks of stone which form the 165 arches across the valley were laid together without mortar of any kind except as a lining for the water channel at the top. The total length of the aqueduct is nine miles and it still carries water to the people of Segovia from the "River Cold."

is lined with large docks and warehouses. There are large factories making cotton, linen, woolen, and silk goods. Other factories are turning out metal goods, fancy leather, and paper. Near the harbor stands a statue of Columbus, for it was at this port that Ferdinand and Isabella received him upon his return from the New World. It was to this

port he came bringing to the reigning monarchs gifts of beautiful furs, brilliant plumage, gold, and silver.

Barcelona is the second largest city in Spain and the most important manufacturing and commercial center. In Barcelona one is surprised to hear the language of southern France, but that is the native tongue. The city people have learned the Spanish language and speak both languages equally well. The bustle of business, the clean, well-kept streets, and up-to-date business methods make life here quite unlike the easy and joyous life led in most of Spain.

This area along the east coast is becoming what we may call a food-supply center. The Moors terraced the hillsides and built irrigating ditches to carry water from the rivers and mountain streams to their lands. This system of farming is still in use, and the region around Valencia is famous today for the gardens begun by the Moors. This eastern region produces wheat, rice, sugar, oranges, grapes, citron, figs, and some dates. It is a great garden which supplies foodstuffs.

You have read of desolate Castile.. You have also read that the northern, the southern, and the eastern regions produce more foodstuffs on a given area than Castile does. What advantage is it to Spain to have large areas which produce more foodstuffs than they need? In order to have those foodstuffs of value in Castile there should be good systems of transportation. The rivers of Spain are not well suited to navigation, for most of them have falls and rapids where they pass from the plateau to the lower levels. At present the railroad system is not good. There are railroads which join Madrid with all the other main regions, but little is done to encourage travel or the shipment of freight. Improved railroads would not only move the surplus foodstuffs and other freight but would also help to hold the different parts of Spain together.

PORTUGAL

Portugal has been called "the garden by the side of the sea." That is the way it appears, especially to the traveler who visits Spain before going into Portugal. Much of Spain is an arid plateau with great treeless plains and cloudless blue skies; a large part of Portugal has abundant rainfall and rich vegetation. Most of Spain occupies the upland plateau; much of Portugal faces the Atlantic Ocean. The winds blowing from the Atlantic bring in moisture and help to keep the summers cooler and the winters warmer than in Spain. Because of the mildness of the climate, plants of the north are seen growing side by side with those of the tropics. Pines and palms grow in the same region and few places in all the world can raise as many varieties of plants as Portugal, "the garden by the sea."

One of the most unusual trees seen in Portugal is the cork oak. It is also a very valuable tree. Its bark has been in common use for more than twenty-five hundred years. How many of its modern uses could you list?

This tree is neither a large nor a beautiful one. It grows to a height of from twenty to sixty feet. It rarely measures more than four feet in diameter. In the spring it is covered with yellowish flowers. The blossoms are followed by acorns which fall to the ground as soon as they are ripe. Although the acorns seem bitter to our taste, they are very valuable as food for swine. The swine are so fond of the acorns that in their foraging they eat not only acorns but also young cork oaks. Why is it a great loss to have the young cork oaks eaten by the swine?

When the cork oak tree is about twenty years old, the first bark is removed. This first bark is so rough and coarse that it is of very little value. But when the first bark is removed, the tree immediately sets to work to grow

Courtesy Armstrong Cork and Insulation Company

FIG. 90. Portugal. Gnarled trunk of an old cork oak.

another, and this new bark is of finer quality. After eight or ten years the second bark is removed, and again the tree proceeds to grow another. From then on, a bark can be stripped off about every nine years, and each new bark is finer and more valuable than the one before. A tree generally produces its best bark when about forty years old, but many trees go on producing cork for several hundred years.

The stripping of the cork oak is generally done in July and August. The workmen must be very careful not to injure the trees. A circular cut is made all the way through the bark around the base of the tree; another circular cut is made higher up. These are then joined by one or two cuts running lengthwise of the tree. The tree's bark is then pried off, but great care must be taken not to injure the inner skin. The larger branches are also stripped and yield a thin layer of a fine grade of cork.

The cork is gathered into piles and left to dry for a few days. Then it is taken to the boiling stations. The boiling helps in removing the rough outer layer of the bark and extracts the tannic acid. It also makes the bark more pliable so that it can be laid flat in packing.

The cork is carried to great warehouses either by wagons or on the backs of burros. Sometimes whole caravans of burros laden with cork pick their way carefully down the trail from the forests in the mountains. The cork is carefully sorted at the warehouses and each grade is baled separately. The bales are much the shape of cotton bales and are bound around with strong steel bands. These bales are then exported to other countries, many of them coming to the United States. Some of the cork is taken to factories in Portugal and Spain, where it is made into articles for use in those countries as well as for export.

Portugal produces about seventy per cent of the world's cork. The cork oak is also common in southern and

eastern Spain and both southern France and Italy grow it in small quantities. It is also a native tree in the countries along the northern part of Africa. These countries around the western end of the Mediterranean are the only countries which produce cork in large quantities. To

Courtesy Armstrong Cork and Insulation Company

FIG. 91. Portugal. Most cork comes from the mountains and hilly regions of Spain and Portugal. Roads in those regions are generally too poor for wagons and most of the cork is carried to the boiling stations by burros.

Portugal we must give credit for supplying the greater part of this useful material.

Southern Portugal is much like Andalusia in southern Spain. There one sees dark olive orchards and vineyards. The orange blossoms scent the air while the golden fruit falls into one's hand. There are many fig trees, each of which bears many pounds of fruit. In February the almond trees covered with pink blossoms are the most

beautiful of all. One garden adjoins another, while here and there one sees a quaint fishing village with its Moorish homes.

About one-half of Portugal is cultivated and most of the people are farmers. A visit to the region of the Douro River takes us into one of the richest sections of all Portugal. There many of the farmers are now owners of their own land. Most of them cultivate small farms of about twenty acres. One rarely sees modern machinery in use, for there is no room for large reapers, threshers, or tractors on these small farms. Neither can the thrifty and hard-working owners afford to buy expensive machinery to work their small tracts of land. Instead, one sees a wooden plow much like those the ancient Romans used in this same region. Each plow seems little more than a crooked branch of a tree with a heavy iron point. The farmer guides it by a single handle. Slow and careful oxen pull it through the ground. At the close of the day's work, the farmer picks up his light plow and throws it over the yoke of the oxen to be carried home.

Notice the oxcart in the picture, for the picturesque wooden wheels are like those once used by the old Romans. Even in the manufacture of wine, the main product of this region, the Roman method of two thousand years ago is still in use. After the grapes have fermented enough, the fermentation is checked with the fumes of sulphur. The Romans preserved the wine in earthern jars; now it is put into barrels, made of oak from the oak forests in northern Portugal. However, we cannot help noticing that the beautifully shaped earthen jars are still made and in constant use. One sees those earthen jars throughout all the rural districts. In them the women carry water to their homes. The vineyards, too, are like those of Roman days, for the grapevines are trained over high trellis work instead of being pruned low. The Moorish

water wheel is still in use here as in Spain to carry water from the rivers and many wells during the summer.

Oporto, which means "the port," is the busy port of this rich agricultural section. It is situated at the mouth of the Douro River, which is full of interesting boats. There are the wine and fruit boats from up river which have

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FIG. 92. Portugal. Ox teams at Oporto. Carved wooden yokes have been used ever since the Moors invaded Spain and Portugal. Many yokes are family heirlooms. Notice the wooden wheels, the style of which dates from early Roman days.

brought their products for sale in the city. Probably much of the wine will be exported. There are heavy-looking, flat-bottomed passenger boats. Men and women, loaded with the supplies which they have just bought in the city markets, are getting on to these boats to return to their rich vineyards possibly sixty miles up the river. Every now and then one sees a boat spread its crimson sail to start on its river journey.

There are coasting boats, too, from France and from the northern part of Spain. Ocean-going vessels are unloading and loading. Coaling boats are leaving coal to run the factories of Oporto. There are fishing boats built after the style of the old Phœnician boats with crescent-shaped prows.

The road along the river is even busier than the wharves. The beautiful fawn-colored ox-teams that haul heavy freight are guided by a barefoot boy or sometimes by a young girl. The boys are dressed in knee trousers, their shirts are open at the neck, and on their heads they wear long knitted stocking caps with bright tassels. Each carries a long stick to guide the oxen. They are earnest little fellows, very much like their hard-working fathers and mothers. Many men and women carry freight in boat-shaped baskets on top of their heads. These baskets seem to be filled with all sorts of things and one can hardly guess whether fish, fruit, or even a sleeping baby is inside.

This road along the river runs beside what was once the ancient river walls. Many small shops have been cut into this old wall, and food and wine shops line the road. Here the sailors and the work-people stop for food and drink and for a few words with their friends. Very steep and narrow streets lead from the river front to the main part of the city. Above the line of shops one sees houses of many colors,—pink, buff, white, and pale blue. Above each row of red-tiled roofs rises another row of pretty houses. Above them all towers the cathedral, and beyond one can see the terraced hillsides covered with carefully tended vineyards.

From Oporto 60,000 Portuguese leave each year to make their homes in new lands. Many of them go to Brazil, which was once a colony of Portugal.

Not all of northern Portugal is as productive as the Douro Valley. Many of the hills are covered with pines

and oaks, but in the valleys are rich fields of corn and fertile vineyards. Eastern Portugal is arid like most of Spain. There one sees fields of rye in some of the valleys. Sheep and goats graze over wide ranges and forests add to the wealth of the country.

Lisbon, the capital of Portugal, is called "The City of the Friendly Bay." It well deserves the name. It is situated seven miles from the stormy Atlantic Ocean and extends for five miles along the right bank of the Tagus River. To the east of Lisbon is the broad bay formed by a widening of the river; to the west is the narrow channel which joins this bay with the ocean.

Lisbon with its "friendly bay" has long been an important port. The Phœnicians traded there in the early days. It was a stronghold of the Moors. It was from this place, looking out over the Atlantic, that Vasco da Gama set sail when he went in search of the new sea route to India. He returned to Lisbon with silks, spices, and perfumes from India after his trip around the Cape of Good Hope. The discovery of the new sea route around Africa to India took much trade away from Venice and the other Mediterranean ports. Lisbon became the most important collecting center for oriental goods on the way to northern Europe. Pedro Cabral went from this region and discovered Brazil. Many other fleets were fitted out for discovering new lands to be added to the kingdom of Portugal. From these new lands, gold, silver, precious stones, and other valuable products poured into Lisbon. It became, for a short time, the richest port on the continent of Europe. But most of this wealth was wasted by extravagant kings and was of very little value to the people.

Today, Lisbon is the most important port between London and the British colonies in South Africa. Explain how that is of advantage to Lisbon.

Lisbon is situated on eleven hills which rise above the north bank of the Tagus River. It is the center of a rich agricultural province. It faces the warm sun and its climate is soft and mild. It is also the seat of Portuguese art and culture. Lisbon is surrounded by many beautiful gardens which thrive almost as well as the gardens of the tropics. One sees many Brazilian plants in the neighborhood of Lisbon. Among the beautiful mansions which surround the city of Lisbon, there are many belonging to wealthy Brazilians. Can you explain why many Brazilian plants are growing in the gardens, and why many Brazilians live in this city?

You would find it quite difficult to walk around some parts of Lisbon. But if you wished, you could ride on the cog-wheel electric cars which will carry you up the steep hills. You might even use an elevator. How would you like to enter an elevator which would go up as straight as if it were in a building and land you at the level of another street? Leaving the elevator, you could walk along a bridge and find yourself on the higher street.

A large part of Lisbon was ruined by an earthquake in 1755. Much of the beauty of the present city is due to the careful planning of the city when it was rebuilt after that earthquake. Beautiful plazas were laid out and surrounded by magnificent public buildings. Wide avenues were planted with beautiful trees. A law was also passed requiring that the upper stories of all buildings be built of light materials. Thus there would be less danger if another earthquake should occur. One sees many buildings with the first story built of stone. The upper stories are faced with many-colored tiles.

Along the river front one sees many scenes similar to those in Oporto. Fishermen come in with tunny, sardines, and mackerel. Bare-footed fishwives, with their baskets on their heads, start out to sell their fish. Oxcarts loaded

FIG. 93. Portugal. A park in Lisbon. Notice that the trunks of some of the palm trees are covered with vines. Many varieties of tropical plants grow in Lisbon, even though it is 38 degrees north of the equator.

with wine casks, wood, or coal lumber along, the drivers strolling beside them and the owners often perched upon the load. Along the edge of the river, away from the busy wharves, the women may be seen doing their family washing in the same fashion as it is done in Italy, France, and Spain.

Along the busy streets one meets the venders carrying baskets full of vegetables or fish. They swing the baskets from long poles carried over their shoulders. The sellers of lottery tickets call to all the passers-by. The water carriers trudge along with their heavy earthen jars. Cows and goats are driven through the streets and milked for each customer. And here, as in Spain, the faithful burro carries all sorts of burdens.

Fifteen miles northwest of Lisbon lies the beautiful village of Cintra. It is situated in the midst of tree-covered hills. Above the village are the ruins of an old Moorish fortress with its great stone walls. On another peak is another famous castle used as the royal residence during the days of the Portuguese kingdom, now carefully preserved by the Republican government. Looking down from these heights one sees many beautiful palaces whose owners come from all parts of Europe. There are picturesque farms and red-roofed villages, there are old stone walls covered with vines, and roadways lined with ferns and flowers. Here flowers are always in blossom and many residents of Lisbon come to spend their summer in the coolness of Cintra's hill. There is an old proverb which says, "To see the world and leave Cintra out is to go blindfold." Modern visitors agree with the old proverb.

GIBRALTAR

Anyone wishing to go from the Atlantic to the countries bordering the Mediterranean must pass through the Strait of Gibraltar. As one steams through this narrow passage between Spain and Africa, one can see on one side the bare hills of Spain, and on the other side the high snow-capped hills of Africa. At the eastern end of this passage, the Rock of Gibraltar, the "Key to the Mediterranean," rises like a gray crouching lion.

Seen from the deck of a steamer, Gibraltar looks like an island, but it really is not. Many hundreds of years ago a strip of water separated Gibraltar from the mainland. As the ocean currents washed the shores they deposited sand in this channel between the Spanish coast and the Rock of Gibraltar. Finally a sandbar was built up which completely joined the great rock to the mainland. Gibraltar belongs to Great Britain, but the central portion of the sandbar is neutral territory belonging to neither Spain nor Great Britain.

The Rock of Gibraltar is of gray limestone. On the north and east it rises almost straight up to a height of 1400 feet. Only on the west and southwest sides is one really able to climb to the top. Let us go to the top. To the north one can see the narrow strip of sandy soil in the center of which is a sandy waste. To the north of this neutral waste land, one sees a row of sentry boxes, and Spanish soldiers walking back and forth. Beyond the sentries are the gardens of La Linea, where the vegetables and fruit for the town of Gibraltar are raised and where the peddlers and laborers who work in Gibraltar live. To the south of the neutral territory is a large race-track and other amusement places for the English army and navy men who are stationed at Gibraltar. To the west across the bay can be seen the Spanish town of Al-

geciras, surrounded by high hills. Huddled below at the foot of the rock and clinging to its western side is the English town of Gibraltar. In the bay one can see the ships of almost all nations of the earth going or coming. But what is that we see to the south! No, it is not clouds, but the smoky, blue hills of Africa, for Africa is only fourteen miles away.

The land around Gibraltar is so near Africa that it has been called the bridge between Africa and Europe. This is the bridge over which the Moors entered Portugal and Spain. One of these Moorish conquerors, Tarik, built a castle on the rock of Gibraltar. He fortified it and called the place Jebel-al-Tarik (Hill of Tarik). This has been changed into the word Gibraltar. Part of the old Moorish fort can be seen today, built into the wall of the new British fort.

Gibraltar has always been considered the guardian of the Strait of Gibraltar. Because Gibraltar is the "Key to the Mediterranean," many nations have fought for the possession of it. No nation ever held it very long until it was taken from Spain by Great Britain in the eighteenth century, and she has held it ever since.

The north, south, and west sides of Gibraltar are honeycombed with passages and galleries where guns are hidden. These passages were carved out of the solid rock and some of them are a half mile long. As one walks through these tunnels one comes upon holes or windows often covered by beautiful vines and flowers. Through these windows one can see the blue Mediterranean, the ships steaming through the strait, and, on clear days, the mountains in Africa.

Gibraltar is one of Great Britain's most important coaling stations. Thousands of ships leave England for Australia, New Zealand, and India. These boats carry manufactured goods and bring back raw materials to keep English

factories running. There must be other stations such as Gibraltar along these routes where coal can be obtained. Many other ships also coal at Gibraltar.

In the streets of the town one sees fair-haired Norwegians jostling dark-haired Italians. There are Britishers bargaining with the Moorish peddlers. There are Greeks and Dutch, and many other nationalities constantly come and go. There are boats of all sizes and kinds; some are tiny rowboats which carry passengers ashore; others are great British battleships. Truly, Gibraltar is one of the busiest and most important spots on earth and may be rightly called the "Key to the Mediterranean."

Queen Wilhelmina one daughter, Juliana
married to a German prince has one daughter who
Jan. 1938.
May 10, 1940 Queen Wilhelmina, her daughter
Princ Bernhard & their 2 little girls one 9 months old fled
to London after fall of Rotterdam. The Nazis take pos
Queen Holland.

CHAPTER VII

LOWLAND COUNTRIES

THE NETHERLANDS

You have always thought of the Netherlands as the quaint and picturesque land of canals, windmills, and wooden shoes. It is that, but it is much more than that. Let us first see why it has so long been a land of windmills.

The Netherlands is sometimes known as Holland, but this is rightly the name of one of its provinces. This little country is called the Netherlands, for Nether means lower and so Netherlands signifies the "lower lands." These "lower lands" which are an important part of the country have been made in a very strange way.

Several great rivers rise in the mountains of central Europe. Many, many centuries ago, as these rivers flowed swiftly down the slopes, they cut great valleys. Day after day, year after year, and even century after century those rivers have carried fine sediment out of the valleys and dropped it along the shores of the North Sea. The most important rivers which are constantly carrying great loads of sediment down to the Dutch shores are the Rhine, the Meuse, and the Scheldt. Many smaller rivers are also carrying similar loads.

When the rivers reach the sea they drop their sediment. Some of it has formed the delta islands which make up the southern province of the Netherlands. Some of the sediment has been tossed about by the waves and the wind and has been built into a great sand dune which skirts

most of the coast of the Netherlands. If you will look at your map you will notice a chain of islands fringing the coast outside the Zuider Zee. These islands are nothing but a continuation of the great sand dunes which border the remainder of the country.

Besides the Zuider Zee there were at one time many smaller lakes behind the great sand dunes. There was also much marsh and bog land; in fact, one-fourth of the area of this country lies below the level of the North Sea.

Let us see how the early Dutch people began to reclaim the low land. At first they lived on the higher land which was above sea level. But as the population increased the Dutch needed more land. In order to reclaim a low piece of land they built a dike around it. Then they pumped out the water from the enclosed area. They also dug ditches through the reclaimed section so that the water could run from the land into the ditches. Then the water had to be pumped from the ditches out into the open sea. Right here is where the Dutch windmill proved itself very valuable. The Netherlands is a flat country, and the wind blows there almost as steadily as over the sea. So the Dutch built wind-water-mills, and as long as the wind blows, their long arms swing round and round and pump the water from the land. These areas which have been surrounded by dikes and drained are called polders and so the Netherlands is sometimes called "polder land."

Many small areas have been reclaimed in this way. Large areas have been reclaimed in the same manner. There are two reasons why the Dutch people wish to reclaim the land occupied by the larger lakes. First, they wish to have the rich land for agriculture. Second, in times of storms the waves of a large lake dash with fury over the dikes and destroy the farm land and villages. Once they even threatened to destroy Amsterdam and Leyden.

One of the most interesting areas reclaimed in the Netherlands is the former bed of Haarlem Lake. Haarlem Lake once covered about 45,000 acres. At the bottom of this lake there was rich soil which had been collecting for many centuries. First, the Dutch engineers surrounded the lake with a great dike. Then they installed three enormous steam pumps which pumped steadily, day and night, for thirty-nine months. At the end of that time Haarlem Lake had been pumped out into the North Sea. Then the engineers dug two large canals through this great polder. These canals crossed each other at right angles near the center of the polder. Then many smaller ditches were dug parallel with these canals, so that all of the reclaimed land was divided into small rectangular tracts. It was necessary to have all these ditches and canals, for all of the land was several feet below sea level. The water would have collected again in the hollow very soon if it had not been constantly pumped from the land. Reclaiming this land took twelve years and cost the government five and one-half million dollars. Then the rich land was ready to sell to the people.

This area is now one of the richest in the Netherlands. If you were to travel there, a farmer would tell you that he has a small windmill which acts as a sentinel for him. This small windmill has a float which rests on the water in the ditch or canal. When the water in the ditch rises to a given height, the float puts the small windmill into gear and its arms begin to swing around. This attracts the attention of the farmer and he knows that it is a signal that he must start his large windmill, or possibly several of them, or his land will soon be flooded.

Do you wonder now why one can often see more than one hundred windmills at a glance? Often a farmer's wealth is reckoned by the number of windmills he has. Each farmer pumps the water from his ditches into a higher

canal. From there it is pumped into a canal which is even higher. In this way the water reaches the main canals, which pour it into the North Sea when the tide is low. During high tide all the gates of the locks are kept carefully closed, for otherwise the sea would back up into the canals and flood the lowlands with salt water.

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FIG. 94. The Netherlands. For centuries the windmills of the Netherlands have pumped water from the land into the sea. These windmills form one of the most picturesque features in "the land the artist loves."

In 1918 the Dutch parliament passed a bill recommending the reclamation of the Zuider Zee. At present, the Zuider Zee covers more than 2000 square miles. Along its outer edge the water is so shallow that one can see large sandbars and mud flats at low tide. Much of the lake is only three feet deep and the greatest depth at any point is only

nineteen feet. The engineers plan to build a modern dike across the narrowest part of the Zuider Zee. Then they will divide the area into separate polders. It is planned that the diking and the pumping will require seventy years. This will cost many millions of dollars, but the expense will be spread over a great number of years. In the end the Dutch people hope to have a half million acres more of fertile soil. This additional land is needed to supply foodstuffs for the increase in population.

Can you imagine how those Dutch people felt, who, on June 29, 1920, at five minutes after twelve, stood and watched the dumping of the first cart-load of sand to begin the first dike on this great project? This new land will be a land of peace and plenty. It will be a land wrested from the sea instead of from neighbor countries.

The wind is both the enemy and the friend of the Netherlands. It is the enemy when, in time of storm, it beats at the outer sand dunes which protect the Netherlands and when it lashes the waves of the Zuider Zee into fury. The wind is the friend when it keeps the great brown arms of the thousands of windmills swinging. But sometimes the wind does not blow. Then the water rises nearer and nearer to the surface of the fields and higher in the ditches. It may even flood the fields and do much damage. Because the wind is uncertain, steam and gasoline pumps are now coming into use, for they can be used at any time and will always keep the water at just the right level. When the pasture land becomes wet and marshy the Dutch farmer says that each cow eats with five mouths. Can you tell how it is that each of the four feet destroys as much grass as the cow eats?

You have seen how the canals are useful in carrying water from the land. They have several other uses. You have heard so much about how wet the land is that you will be surprised to find that sometimes this water is used

to irrigate the same land from which it came. During the latter part of the summer more water may evaporate from the fields than falls as rain. Although so much of

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FIG. 95. The Netherlands. Boys towing a boat along a ditch near Volendam. Why is a towpath necessary? The use of gasoline and steam engines on the canals is increasing.

the Netherlands is a wet country, and although it rains on more than two hundred days each year, the annual rainfall is not great and sometimes these polder lands need more water. Then the gates on the canals are opened and

enough water is permitted to flow down onto the land to keep it in the best condition for the crops. Have you ever heard people talk about how much their crops needed more rain? The Dutch can supply the water from their canals when rain does not fall at the right time.

The canals also take the place of many roads and railroads. Almost all the freight of the Netherlands is carried by boat on her many rivers and canals, although the country has more miles of railroads than of canals. As one looks over the landscape one sees tall sails which seem to be moving right through the fields. But the boats are really on the waterways. Can you tell what use is made of the canals during a cold winter?

How would you like to spend all of your life on a barge? Some of the Dutch children do that very thing. If you were to take a trip on one of the large canals you would see barges which are used as homes and for carrying freight at the same time. The father makes his living carrying goods. His wife goes with him and their home is in one end of the boat. There the children are born and live. When the boys become young men they try to start out in boats of their own. When the girls are grown up they are very likely to marry some of the barge men. But this barge life which has always been so interesting to the travelers in the Netherlands is disappearing. The government of the Netherlands does not want the Dutch children brought up in these boats because they have no chance to go to school. Because of this the government has passed a law requiring that children shall spend a certain amount of time in school. Of course their parents wish to stay with them, and so little by little these barge families are finding homes in the towns. From those homes the men go to their barges on the canals.

The canals have another very important use. They are called the Netherlands' first line of defense in time of

war. How can the canals help in this way? There is a large canal which extends all the way from the Zuider Zee to the mouth of the Meuse River. The locks and gates in this canal have been very carefully planned by the skillful Dutch engineers. In case of invasion, the engineers can flood fresh water over a strip of land seventy-eight miles long and seven and one-half miles wide. Do you think it would be easy for an army to wade across this strip of land? They could not tell where the ditches and canals are and they would no sooner pull themselves out of one ditch than they would fall, unsuspectingly, into another. After the danger is past the Dutch can close the locks and pump the water off the land. Can you tell why this fresh water would do less damage to the fields than salt water?

Even the rivers in the lowlands of the Netherlands must be held in by dikes. Look at your map and notice that the great rivers of the Netherlands rise far to the south. When they begin to thaw in the spring the parts of the rivers farther south thaw first. Great floods are likely to sweep down over the Netherlands and if the dikes were not very strong and carefully watched the rivers would ruin much valuable land.

Did you know that you could travel in a boat on the Rhine River and look into the second story windows of many Dutch homes? You can really do that. The Rhine River carries sediment all the way from the mountains. It keeps depositing the sediment in its bed and so the river is getting higher all the time. In this it is very much like our lower Mississippi River, which is still making delta land and constantly building up its bed.

The Dutch have a saying, "God gave us the sea, but we made the shore." Their country is often spoken of as "brave little Holland." And brave it has been, for it has not only wrested a large amount of land from the

waters; it must also be on constant guard to see that storms do not break through the dikes and that the pumps are always ready to do their work. More than one-third, and that the richest one-third, of all Holland is polder

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FIG. 96. The Netherlands. Weighing and loading hay along the dike at Marken. This island in the Zuider Zee is one of the quaintest and most picturesque places in the Netherlands. About nine-tenths of the freight is carried on waterways.

land, and each year this small country spends over three million dollars in taking care of its dikes.

Did you ever guess that the stork is an ally of the Dutch? You may think him a very useless bird as you see him standing on one leg sleeping lazily in the sun. But watch him when he gets hungry. Then his long bill is very useful, for he catches and eats some of the small animals

which burrow into the dikes and weaken them. The Dutch think the storks are a sign of good luck and rejoice when they build their bulky nests against the chimney or in a box on the top of a long pole. Why does the Dutch government not permit any of these storks to be killed? Can you tell why the storks migrate southward in the winter?

Because the Netherlands is a low, wet country it has much pasture land for raising cattle. The Dutch are very proud of their pure-bred stock and dairying is the main industry. As one travels in the northern lowland regions, one sees beautiful black and white animals. In the southern part, farmers raise the red and white cattle which are equally well marked. During the summer the cows spend most of their time grazing in the pasture. Sometimes the careful owner covers them with blankets to keep off the flies and mosquitoes. In the winter time the cows are housed in the cowsheds which are often under the same roof as the farmer's house. Does that seem strange? It really is not strange, for Holland has to import most of her timber and also most of her stone. It requires less timber to build the home and the cowshed if the two are built end to end. And both home and cowshed are kept very clean, for the Dutch people are well known for their cleanliness.

Much of the milk produced in the Netherlands is made into cheese. Would you like to visit the famous cheese market which is held at Alkmaar once each week? It would be best to go to Alkmaar the day before, for then you could see the cheese arriving from all the near-by towns. You see a couple of barges coming down the canal. They tie up in front of the weighing house. See that man in the first barge. He picks up two round balls of cheese and tosses them to another man standing on the shore. This man lays them in rows on the sheet which

covers the pavement. How rapidly the yellow balls fly! Are you not glad that none are dropped? The man in the other barge is rolling his cheeses down a narrow trough. His cheeses, too, are being laid in regular rows on the pavement. Cheeses seem to be flying in all directions. All the afternoon and even during the night the cheeses keep arriving. You cannot but wonder how the Dutch can make so many cheeses each week.

The next morning everyone is busy. The owners go around patting their cheeses into shape for the last time. The buyers are looking over the stock. Soon the market is opened and the bargaining begins. Who are those two men dressed in white who are coming out of the weighing house? They are the porters and they carry the barrows loaded with cheese into the weighing house to be weighed. It takes only a short time to sell all of the cheese. Then the men who brought the cheese get into their boats or wagons and go back home.

The buyers have their cheeses carried to the large warehouses. There the cheese dries and ripens and is painted with a coat of red preservative. In the United States this cheese is called Edam cheese.

Most of the cheese and also butter of the Netherlands is now made in factories instead of in the homes. About two-thirds of the factories are coöperative, as in Denmark. Quantities of dairy products, butter, cheese, condensed milk, and powdered milk, are exported to Germany, Belgium, and England and to more distant countries.

South of Alkmaar is the city of Haarlem. Still farther south is the old town of Leyden. You would like to visit in the region of Haarlem and Leyden in the early spring. Both of these towns are situated east of the great sand dunes which protect the Netherlands from the North Sea. These dunes also protect this region from the cool sea winds of early spring. Haarlem is also fortunate in being

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FIG. 97. The Netherlands. In the Alkmaar cheese market. These cheeses have been placed on cheese barrows and are ready to be taken to the weighing house by the two men in white. They have not yet been covered with the familiar red coating. Notice the piles of cheeses along the canal. When the market opened, the market place was covered with such piles.

situated on the edge of the rich region which was the former Haarlem Lake.

Here, in the spring, the air is fragrant with the odor of hyacinths. On one side is a bed of deep purple-blue hyacinths, called King of the Blues; there is another bed of dainty blues named Queen of Blues; there are white ones called Innocence; and each of the yellows, golds, and reds has its own fantastic name. There are beds of tulips, too; some are plain and small, but many of the tulips are large with crinkled petals. A short distance away are other beds of hyacinths and many other flowers grown from bulbs.

Did you think that these flowers were being raised for their pretty blossoms? No, in June and July the bulbs are harvested. Then they are dried on racks and are ready for export. Most of the bulbs which you buy in the United States have been sent here from this very region.

After these Dutch farmers have harvested their bulbs they raise a crop of vegetables on the same rich soil. Cabbages, cauliflower, onions, cucumbers, and other vegetables are raised for the home market and are also exported. All summer long one sees the covered vegetable boats quietly moving along the canals to the villages and towns. The raising of bulbs and also of vegetables requires a great amount of labor. But the Netherlands is more densely populated than any other country on the continent except Belgium, so there are plenty of hands to raise these products. The Netherlands has an average of more than five hundred fifty people to the square mile while the United States averages less than forty.

You noticed that the plants grown from bulbs were not raised for their beautiful flowers. Around the village of Aalsmeer you can see millions of flowers that are being raised for their own beauty and fragrance. From October

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FIG. 98. The Netherlands. The raising of hyacinth bulbs for market is one of the most important industries of the Netherlands. Over three hundred years ago, Dutch traders brought bulbs to the Netherlands from the Orient.

to December many of the hothouses are filled with curly chrysanthemums. Others are fragrant with lilacs which are being forced into bloom and which produce a million and a half sprays of flowers for market. Some gardeners produce hothouse lilies of the valley during the winter months, and more than two million of these dainty flowers are sold. After the New Year the white roses are forced. And so all winter long the hothouses are busy. The flowers are carefully packed and shipped to the large cities on the continent. Some are even sent to New York City.

What is that across the way? It looks like a green zoo. There are green ostriches, ducks, lambs, bears, cats, and many other familiar animals. There are pyramids, columns, vases, and flat bowls, too. What can these strange green things be? As you go nearer you find that each of these objects is really a box tree or a yew tree trimmed to resemble some animal or object. 'Aalsmeer has great nurseries for raising both ornamental and fruit trees. The young trees are carried in truck loads to different parts of Europe and are sent in large cases to the United States.

Did you ever hear of peaches and grapes being raised in large hothouses? You could visit such hothouses near the city of Hague. Fruit so raised is very expensive. In summer time the Netherlands raises apples, pears, plums, grapes, cherries, strawberries, and other delicious fruits for common use.

Have you been wondering why it is that this little country can raise so much to the acre? Can you tell why such farming is called intensive farming? Most of the reclaimed land is very rich because rich sediment collected in lakes and marshes for centuries before the land was drained. The Dutch fertilize their land with rich dredgings from the canals and with barnyard fertilizer from the dairy sections. The Dutch also increase their dairy products by importing additional food for the cows. They import

cottonseed meal from our southern states and from southern California.

Besides the products of which you have read, the Netherlands produces rye, potatoes, and sugar beets. Wheat and corn are produced in smaller quantities. However, not enough grains are raised for feeding all the people and great quantities are imported through the ports of Amsterdam and Rotterdam.

Rotterdam is the most important port of the Netherlands. You have read of the importance of the Rhine River which flows through the most productive part of Germany. The Meuse River runs through the Belgian coal fields and busy cities are located on its shores. If you will study your map you will see that Rotterdam is the port for both of these great river systems. The Scheldt River, too, has its outlet through this country. That river runs through the heart of busy Belgium. These three rivers, the Rhine, the Meuse, and the Scheldt, with their many tributaries and canals, form the busiest network of waterways in all the continent of Europe.

You have learned that all of these rivers carry large quantities of sediment which they are constantly dropping at their mouths. Because of this the Dutch have built a great canal, called the New Waterway, which connects Rotterdam with the North Sea. Through the great locks on the New Waterway, Atlantic vessels reach the port of Rotterdam. There one finds more than one hundred cranes, some of which are electric, busy unloading and loading the boats. Some of the ships of the large merchant marine of Holland are lying at the docks. A great ship is seen arriving from the United States. Watch how the endless belts and also the great pumps are emptying the boat of its wheat, corn, or rye. Other ships are also unloading cereals, for not only the Netherlands must be supplied with foodstuffs, but also the many busy towns

along the Rhine River. Some of the grain is being stored in large, modern elevators; some is being loaded directly onto the river barges for shipment up the rivers. Four-fifths of all the Netherlands' river trade is on the Rhine.

At another dock English boats are unloading cheap coal to carry on the growing industries. Other boats are bringing zinc and other metals. Some of these ores are for the Netherlands because she has almost no minerals of her own. Some are to go to Belgium and Germany. Others are being sent from Germany and Belgium to other countries, for Rotterdam has a great transit trade and goods are shipped in both directions through this port.

One sees many raw products being shipped in for use in the factories. There are large quantities of cotton which are made into calico and other goods. There is wool, linen, and silk for other textile factories.

Some of the products from the Dutch colonies also enter the Rotterdam harbor. Did you know that the Dutch colonies in the East Indies are sixty times the size of the mother country and have six times as many people? These colonies are very wisely governed and the great Dutch steamers bring many tropical products from the East Indies. These products include tea, sugar, cacao, coffee, rice, tobacco, indigo, petroleum, copra, rubber, dyewoods, spices, and gums for paints and varnishes. There are factories for refining the raw cane sugar, for making the well-known cocoa and chocolate from the cacao beans, for making cigars from the tobacco leaves, for husking rice, and for roasting coffee. Many more products from the colonies enter the port of Amsterdam.

The Netherlands has very few forests and much timber is needed for making the dikes and the houses. One sees Norwegian and Swedish boats unloading large cargoes of timber at all the Dutch ports. Large quantities of

this timber are used in the many shipyards in which hundreds of canal boats are built. Large quantities of stone are brought from Norway for use as ballast in the dikes and for facing the surfaces of some of them. One also sees large petroleum tankers pumping their contents into storage tanks or into small tank barges which carry the petroleum up the rivers.

Rotterdam, like The Hague and Amsterdam, is built upon the lowland which has been reclaimed from the sea. It, like the other cities, has many canals. Would you like to roam through one of the main business sections of Rotterdam? Before you go very far you will come to a bridge across a canal. Possibly the bridge will be open for boats to pass. While waiting to cross, you may stand on the edge of the canal and watch the many barges pass by. When the bridge is closed, you will pass on down the street and come to a wider canal. You notice that the barges are collecting on both sides of the bridge. When the bridge opens you will see as many as fifty large barges pass through. You see the bridge-keeper take a long pole with a string tied to one end. There is a small tin can at the end of the string. As each barge passes through the bridge, the gate-keeper lets the tin can down to the bargeman, who puts the price of the toll into it. Finally the signal is given for the bridge to close. A few belated barges hurry through, as they do not wish to wait until the bridge opens the next time.

If you were to stroll along one of the canals which lead to the New Waterway, you would see river barges along the quays unloading goods from Germany and Belgium as well as from different parts of Holland. The quays seem to be piled with a great medley of articles. Heavy trucks are being hauled over the noisy cobblestone streets by large draft horses. Many of these trucks are hauling imports to the great warehouses which line the street across

from the quays. One certainly cannot miss the air of bustle about this old-world city. Her merchant fleet is fifth among the merchant fleets of all the world. Her ships carry goods between the Netherlands and her colonies, and they also come to the United States and to most of the other important countries of the world.

After you have studied Belgium you can decide which city you think will grow the more rapidly, Rotterdam or its near-by Belgian rival, Antwerp.

Only sixteen miles from Rotterdam is The Hague, the capital of the country. It is the third largest city in the Netherlands but is a place of beautiful residences rather than a place of industry. There you can see the royal palace, a great royal library containing more than one million books, a famous picture gallery, the houses of parliament, and many other interesting buildings. You would enjoy a trip over some of its canals or along its shaded avenues. Most of all you would like to visit the beautiful forest outside the city. Here you could wander for hours among the beautiful old trees, trees so old that some people think they are a part of the very old forest which once covered all this plain.

Amsterdam is the largest city in this little kingdom. Like Venice, it is a city built on many islands and has more than three hundred fifty bridges crossing its many picturesque canals. Like Rotterdam, Amsterdam is joined with the North Sea by a large canal, called the North Sea Ship Canal. Amsterdam is a very busy port but its docks are not so busy as those of Rotterdam. Would you like to ride around the docks? At one end you would see a great petroleum dock where only petroleum is handled. Next to it is a large timber dock piled high with logs and boards. Then there is a grain dock. In the center of the harbor is the large central railway station. Beyond are great warehouses and buildings of ship-owning com-

panies. At Amsterdam one sees large quantities of products from the colonies, and that city has a very large trade in tobacco, coffee, and tea. One part of the harbor is used only by the fishing boats, for many Dutchmen make their living fishing in the North Sea and neighboring waters.

Another canal connects Amsterdam with the Rhine River, so you might even think of Amsterdam as a Rhine port. Of what advantage is that canal to Amsterdam?

Are you wondering if all the goods which are shipped from Germany and Belgium have to pay duty? No, the commerce on the rivers and canals is practically free. The Dutch people make a large amount of money, however, in storing the goods and in loading them from one boat to another.

Amsterdam has many industries, but you would probably find the diamond industry the most interesting. Many diamond workers fled from Antwerp to Amsterdam in the sixteenth century when Belgium was being overrun by Spain. These men began the diamond industry in Amsterdam. Today there are more than seventy establishments which cut and polish diamonds. If you were to visit one of those workshops you would find rough diamonds being cut and polished. In both the cutting and polishing, diamonds and diamond dust are used, for diamonds are so hard that only a diamond will cut a diamond.

Amsterdam is a very modern city. You might expect, if you visited the schools, to find all the children wearing wooden shoes as they do in the villages and farms where the ground is very damp. But most of the Amsterdam children wear leather shoes just like yours. You have often read that the boys and girls dress like little men and women. In the rural districts one can still see these quaintly dressed children. In Amsterdam you would be somewhat disappointed to find the children dressed very much like yourselves.

Almost all the houses of Amsterdam are built on piles. Is it any wonder that an old writer said, "I know a city in which the people live like crows in the tops of the trees"? Many of the older houses are tipping, as the piles settle deeper into the mud. As you walk along one of the old

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FIG. 99. The Netherlands. "Backyards" in the oldest part of Amsterdam. The smaller barges in the picture are like those used in bringing fruit and vegetables to market.

streets or travel by boat on one of the old canals you wonder if any of the houses are going to topple over on you! Some of them seem to be nodding to you, while others seem to be trying to lean away from you.

When you go to the Netherlands do you not hope that it will still be a land of busy windmills and noisy wooden shoes? Do you think that it will be? Why?

BELGIUM

Belgium is a bee-hive of industry. Let us travel through this country and find out what it is that keeps the many Belgians so busy.

Belgium is made up of two very different parts. We will first visit the Belgian plain which occupies the northern and western sections. It looks as if we were still in the Netherlands! Away in the distance, along the shore of the North Sea, are great sand dunes and dikes. Those protect the Belgian lowlands which, like the Dutch low-

lands, have been wrested from the sea. There are many canals crossing the country; the great arms of the windmills are whirling around, grinding some of the grain and pumping water from some of the low areas. Even the people look like the Dutch, for on this plain, which is called the Plain of Flanders, many of the inhabitants have light hair and blue eyes. You hear many words which remind you of the words of the Netherlands. In this region the people speak the Flemish language, which is very much like the Dutch and the German.

Along the seacoast of Belgium the land is sandy and unproductive, but farther inland the plain is like a great market garden, especially in the western part. The land is divided into very small farms, for most of the peasants own less than five acres. These holdings are among the smallest in all the world. In this part of Belgium there is an average of 1300 people living on each square mile. As one travels along the road one passes many peasant cottages, each surrounded by its small tract of land. Rarely are there lawns or shrubbery, for all the land must be used for raising crops. There are men, women, and children working in the gardens, caring for the fruits and vegetables. You wonder how each owner can tell where his land ends. There are no fences, hedges, or walls, but just a narrow furrow separating one man's garden from his neighbor's. There are miles of vegetable, fruit, and flower gardens. The peasant homes, each on a small tract of land, are so close together that it seems more like a village than a farming region. As one nears the city of Ghent the land is bright with flower gardens. There are also many nurseries and hothouses and so many flowers are produced around Ghent that it is called "The City of Flowers."

Many of the fresh vegetables and flowers are carried in barges down the canals to the port of Ostend. There they are put on the boats to be taken to London. Not all of

the fresh vegetables are exported. Large quantities of peas, asparagus, and other vegetables are raised for the canneries in Belgium.

Many of the men who live on these small tracts of land work in the towns. In the morning one can see them

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FIG. 100. Belgium. Along the quays in Ghent. Ghent is at the junction of two navigable rivers and is connected by two canals with the sea. The barges seen in the picture are typical river barges of this and surrounding countries. What kinds of freight do you see on the quay?

boarding a train to go to a near-by city. After working all day in a factory they return home. During their absence, the wives and children cultivate the small farms. Often the wife raises a pig, some poultry, or possibly a few rabbits. Can you name the articles of their food which are supplied at home? Some grains are also raised in this region, but wheat must be imported into the country. Many potatoes are raised and sugar beets are also pro-

duced. What in this region reminds you of northern France? Why? What is different?

The many men who work in town and live in the country can do this because of the cheap railroad fares. If you wished to travel through Belgium you could buy a ticket which would be good for one year on any of the railroads, and it would cost you only seventy-five dollars. The men who go into town to work in the factories ride on the trains at even a lower price. Of course Belgium is a very small country and distances are very short. You might travel by train from one end of the country across to the other side in a little more than four hours. Freight rates, too, are low, and the farmers can send their produce to the cities for a very small sum of money.

In the neighborhood of Courtrai one sees many fields of flax. The climate is moist and the soil especially suitable for raising it. Much of the flax is retted in the Lys River, as its water is especially good for that purpose. The flax is put into the river in large bundles and is weighted down with heavy stones. While soaking in the water, the woody portion of the flax stem softens and breaks away from the fiber. When the flax is taken from the water it can be stripped, that is, the woody portion can be combed away from the flax fiber. The industry is so important that no traffic is allowed on the Lys during the retting season. The flax is stripped around Courtrai and then much of it is shipped to Ghent to be manufactured into linen. Ghent also imports large quantities of flax from Russia and the Baltic States for her linen factories.

During the Middle Ages, Flanders was the most important woolen manufacturing region in all Europe, although most of the wool had to be brought from England. The woolen industry is still carried on in Flanders. However, Belgium no longer ranks as one of the important regions for the woolen manufactures. Belgium produces little of

her own wool, but is still well known for her carpets and her tapestries.

The skill of the Flemish weavers is now applied to the manufacture of cotton more than of wool. Ghent is the center of the textile industries of Flanders. It is connected

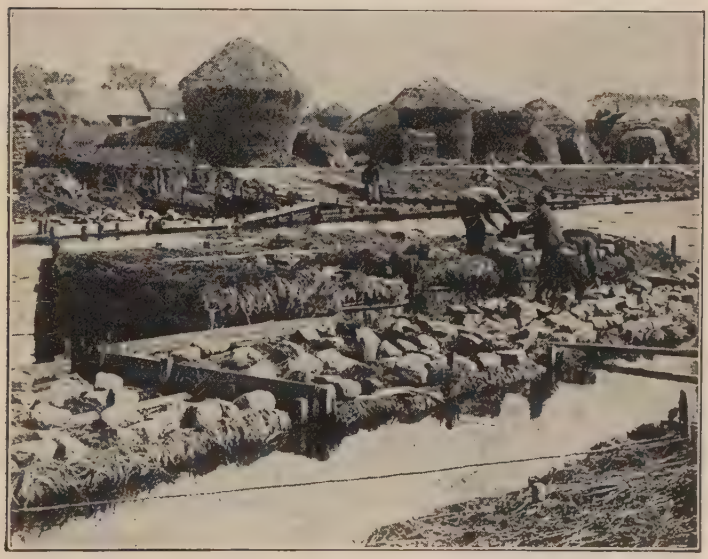

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FIG. 101. Belgium. Retting flax in the river near Courtrai. How is the flax held under water?

with the North Sea by a canal and the smaller ocean-going boats bring thousands of bales of cotton to the doors of the factories. Much of the cotton manufactured in Ghent is raised in the United States.

Bruges and Courtrai are sometimes called the "dead cities" of Flanders. At the time that Venice controlled the trade between the Orient and Europe, Bruges was the main port at the north. Bruges was the center of the rich and

densely populated "Low Countries" now called Belgium and the Netherlands. If you look at your map you will be surprised to learn that, at one time, Bruges was really an ocean port. Ocean ships once sailed up the river to the wharves of Bruges, and for four prosperous centuries

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Fig. 102. Belgium. The famous La Liève, a flax spinning mill in Ghent. The city is noted for the spinning and weaving of linen and cotton.

Bruges reigned queen of the north. There the rich merchant princes lived in their beautiful palaces. There they gathered precious stones, tapestries, silks, and linens. At that time Bruges was the greatest wool market in all the known world. Then misfortune overtook her. Toward the end of the fourteenth century her harbor filled up. At the same time the ocean ships were being built larger and larger. The ocean vessels could no longer reach her docks and Bruges became a "dead city."

Bruges is today an interesting medieval city. One enjoys its wide streets, its beautiful gardens, its many canals, its low gabled houses, and its old art treasures. On its canals beautiful swans still play as they did in medieval times. Along its once busy quays one sees outdoor markets with a great variety of cheap wares. Dogs are seen hauling milk and vegetable carts through the streets, and thrifty women or young boys offer their supplies for sale. Every quarter of an hour the chimes in the old belfry fill the quiet air with their music. On the outskirts of the city one sees lines of willow trees along the canals, and one is reminded that many willow baskets are sent from Belgium to the United States. Beyond, one sees the arms of the windmills lazily turning in the breezes.

Bruges is still the center of an old industry, —the making of hand-made lace. As one goes along the streets, one sometimes sees women sitting at their doors bent over their work. Many of them are making lace, which we call pillow-lace because the pattern is outlined with pins on a pillow. Around among these pins the tiny bobbins fly. You would find it a very tedious task to learn how to make this lace. Although you would begin with very few bobbins, you would soon have the threads all snarled and knotted. Many of the Belgian girls work day after day and at the end of several years they can make very beautiful lace. If you will stop and look at one of the pillows with its many bobbins you will often find that no two of the tiny bobbins are alike. When a young girl wishes to learn how to make lace she starts with a few bobbins, possibly not half a dozen. Sometimes each one of these is given her by a different friend or relative and so each one has its own history which she loves to remember. As she becomes more skilled she is given another and then another or possibly buys one with her small earnings. Finally she has enough bobbins to make

a very difficult pattern. It is said that some patterns are made with as many as a thousand bobbins, but those must be very, very difficult.

Much of this lace is made in the rural districts throughout Belgium. The difficult patterns are generally made during the long summer days, in spite of the fact that the women do much outdoor work. The women who make this lace receive very small pay for their work, for a long time is required to make each piece. Each year an annual lace exhibition is held at Brussels. At the present time large quantities of less expensive lace are made in factories of Ghent and other Belgian cities.

Can you imagine a line drawn across Belgium extending almost east and west and running south of Brussels and north of the city of Liège? Follow that line on your map. This line divides Belgium into the two parts mentioned at the beginning of this chapter. North of this line lies Flanders with its Flemish gardens and textile industries. South of this line lies what is called the Walloon country.

As you travel from northern to southern Belgium much seems to be different. You no longer hear the Flemish language; instead, you hear a language like the French. The people are not fair-haired and blue-eyed; instead, they have dark hair and eyes. Even the country looks different; instead of the lowlands with their many canals you see a hilly country which, toward the south, rises to a height of about two thousand feet. Here many of the rivers flow in deep canyons, and wooded areas give an added beauty.

In this part of Belgium one does not find the peasants' homes scattered throughout the area. Instead, the men who work the land have their homes in villages. In the morning they go to work on land which they have leased. One does not find many of the carefully cultivated market gardens here. Oats are raised on the rainy highlands,

rye on the sandy areas, and wheat on the richer soil. Instead of a very dense population the people are more widely scattered. Here and there one sees an old chateau, its towers just showing above the woods which surround it.

Even the industries of southern Belgium differ from those in the north. Southern Belgium may be called a great factory district, and there is a very good reason for that. Southern Belgium has valuable coal mines which extend in a line from the region of Mons to Liège. These coal fields are really a continuation of those in northern France, and the same coal fields extend into Germany.

Because Belgium has these large coal mines she has developed a great steel industry. In spite of her small area, she has become one of the great manufacturing nations of the world. In the days of Julius Cæsar the people of this region mined iron ore and made tools and weapons from the iron. In all the great Roman Empire, the region around the city of Liège produced the largest amount of metal work. During many centuries fires burned brightly in hundreds of home forges. Many forge-workers bent over the red hot metal and molded it into shape. In early times, whole villages made nails by hand and the region became famous for its well-made products. Nails are still made in Belgium, but instead of hand-made ones, the workers in factories turn out many different styles. Today most of the iron ore used in Belgium is imported from the Moselle Valley of which you have read, but the iron industry is still important.

Today Belgium is known all round the world for her steel products. She sends her railroad equipment to South America and the Asiatic countries. Heavy steel rails from Belgium enter the Pacific ports of the United States. It seems as if no place were too far away to become a market for her steel goods. The factories turn out great

steel bridges, windlasses, cranes, traveling hoists, overhead railroads, heavy girders, strong steel structures to form the framework for new buildings, boilers for locomotives, and street-railway cars. Great boats call at Antwerp and load with these bulky steel goods. Some of the ships which leave their cargoes of foods and other raw products at Rotterdam call at Antwerp for a return cargo of manufactured goods.

The center of the Belgian steel industry, as it was of the iron industry in olden times, is Liège. Liège is especially famous for the manufacture of arms and ammunition. The city is located on the banks of the Meuse River. Many other great steel centers lie along this same river and are so near to Liège that one can hardly tell when leaving one city and entering another. This region of mining and manufacturing is such a busy one that it has been given the name, "The Workshop of Europe."

Another great industry of Belgium is the manufacture of glass. Belgium has coal, fireproof clay, smelting sand, and the other materials which are necessary for making glass, and has them all in the same region. Because of this there are many factories making window and plate glass, much of which is exported. Other factories make all sorts of glass articles for use on the dining table. If you live in a large city you can probably find Belgian tumblers, goblets, and vinegar flasks at many of the stores. You may also be able to find some cut glass made in Belgium. Belgian glass is shipped to our eastern ports and large quantities of plate glass are brought through the Panama Canal to the western ports.

Brussels, the capital of Belgium, has the charm of an old city as well as the conveniences of a modern one. Many centuries ago it was a small city located on both sides of a stream. Today that stream still runs through the town but it has been completely arched over and the Inner

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FIG. 103. Belgium. Along the quay in Ghent. Ghent is one of the old cities of Belgium. Some of these houses were built as early as the twelfth and others as late as the seventeenth century. Which houses do you think are the more modern?

Boulevard is above it. If you really wish to see the river you will have to go to the outskirts of the town. The old walls which once surrounded the city have been torn down and a boulevard now occupies their site.

Brussels is sometimes called the Paris of Belgium. As one loiters around the hotels and shops one hears the French language spoken more frequently than the Flemish. Brussels has always been a seat of court life. In the early days the dukes of the province had their residences there. Today it is the home of the royal family and the seat of the government.

Brussels has many buildings which you would like to visit, such as the picture gallery, the beautiful cathedral, the old library, the royal palace, and the government buildings. Probably those around the main square would prove most interesting. There you will find the Hôtel de Ville, which is one of the most beautiful buildings in Europe. Beside it are other famous buildings, including several old guildhalls.

A trip of one hour by train will carry you from the gay capital to the busy port of Antwerp. Antwerp, although a great ocean port, is situated fifty-six miles from the sea, on the estuary of the Scheldt River. It is connected with all of the important cities of Belgium by canals. Canals also join it to the Meuse and the Rhine rivers.

The people of Antwerp tell an interesting legend of the founding of the city. A very long time ago a giant lived in a tower on the bank of the Scheldt. He stood astride the stream and always kept watch for boats coming up the river. As a boat came near, he leaned over and picked up both the boat and the crew. Then he demanded toll. If the captain was unable or refused to pay the toll, the ugly giant cut off the captain's right hand and threw it into the river. Finally a man appeared who killed the giant. Today you can see in the square of Antwerp a

statue of the man who is supposed to have killed the giant. In his hand he holds the giant's severed hand.

Did this story spring up because Antwerp demanded toll in very early days? Possibly so, but in the Middle Ages she was a free-trading city and because of that her trade prospered.

When the harbor of Bruges silted up, Antwerp became the main port of the Low Countries. In those days Venice had begun to decline and Lisbon was controlling the commerce with the Orient. Antwerp was the great port on the north. This area was the center of manufacturing and of a dense population. Many different articles were brought to the docks at Antwerp; there was wool from England; grain, wood, and skins from the countries bordering the Baltic; wine from France and the Rhine Valley; spices and sugar from the Portuguese colonies; and Oriental luxuries from Lisbon and Venice. Here the traders were free to exchange their wares and each trader returned from Antwerp with a new supply of goods. Antwerp became very prosperous and it has been claimed that as many as one hundred ships sailed from her harbor each day. When the Spanish conquered this territory, Antwerp became less important, and many of her merchants went to Amsterdam.

Today Antwerp is a very busy port. Along her miles of docks one hears a Babel of tongues. There are sailors from the large British merchant marine. Norwegians and Swedes are there delivering wood pulp and other products in return for manufactured goods. The French are there, and some of them are handling the French goods which have come from northern France by way of the canals. There are Germans exporting German goods from the factory towns of the Rhine. Many of the other countries of Europe are represented there and even the Japanese are seen unloading and loading goods. There

are many longshoremen who are handling products from the Belgian Congo. Copper, palm-nuts, ivory, gold, palm

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FIG. 104. Belgium. Dogs do useful work in Belgium. What is in the cans?

oil, and rubber are imported from that rich territory and furnish raw materials to some of the factories. Would you like to sit in the cafés near the docks and watch all

these different people as they come and go? Can you tell why many European children often learn more languages than you learn?

One of the famous sculptors of Belgium made a statue called "The Dock Laborer." You can see it today in front of the Fine Arts Museum in Antwerp. Can you explain why he thought that subject a good one for a Belgian statue and why the city of Antwerp wished to own it? The same sculptor made a model of "The Puddler." If you look in your dictionary and find what a puddler is, you can tell why the sculptor used that subject. "The Puddler" stands in the Royal Museum of Sculpture at Brussels. In what city of Belgium would that statue be more suitable?

Antwerp has many places of beauty and interest, but there is one place in which you would be particularly interested. That place is the old Plantin House. As one steps from the street into the door of this famous Plantin House it is like stepping back into the sixteenth century. Mr. Plantin established a world-famous publishing house and became one of the rich merchant princes of that time. In this old mansion he had his residence and also his place of business. There is the little shop in which the books were sold. In the study, half-corrected proofs still lie on the table. There is the foundry where the type was made, and the printing room with its cumbersome presses is left as if the operator had only gone out to lunch. There you can see some of the beautifully printed books of those early days, with their bright coloring and queer lettering. Then there are the dining room, bedrooms, and other living rooms of the family, all left to show the life of those times. Even the guides who show you about are dressed in the garb of the sixteenth century. This building now belongs to the city of Antwerp.

This little country of Belgium has suffered because of

her position. Over three hundred years ago this region was called the "cockpit of Europe." Its plain offers an easy route between central and western Europe. Through the centuries, warring nations have fought for its possession. A few miles from Brussels is the battle-ground of Waterloo where Napoleon was defeated. During the late World War this region became the battle-ground for German armies advancing toward France.

But Belgium has gained because of her position. Notice the great industrial nations which surround her. These nations form a ready market for many of her products and much trade passes between Belgium and these countries. Belgium is situated on the North Sea and near the English Channel. Those waterways are the busiest waterways surrounding Europe, and Belgium profits by her nearness to them. Besides these advantages, Belgium is covered by a great network of rivers and canals, another network of railroads, and a third great network of good roads. Over these excellent routes the products of Belgium and the neighboring nations are transported to the ports. From there they can be shipped to the markets of the world.

George V reigned 1910 - 1936 died at Sandringham Jan. 20, 1936, succeeded by son Edward VIII - 37 monarch since Norman Conquest 1066 - Kin. Edward VIII abdicated throne Dec 10, 1936 succeeded by his brother Duke of York as George VI - Prince Edward left Eng. Dec. 11, 1936 an exile, the name Duke of Windsor. Gov. General Bahamas Jan 1937

CHAPTER VIII

THE BRITISH ISLES

ENGLAND

SOMETIMES the small and seemingly unimportant may really be great! It is true of people, as you know. It is also true of countries, and England is one of the best possible illustrations.

One might study the map of Europe for hours without giving much attention to the islands that lie just off the northwest edge of the mainland. They seem unimportant. We shall find, in this case, that the small, too, is important, for the islands are the British Isles; the largest of them is Great Britain, and the largest part of Great Britain is England. Through centuries of history, England, although small, has held an important place and has earned the right to be called great. Let us find some reasons for her greatness.

From the beginning of English history, the mystery and charm of these island shores whetted the curiosity of the mainland inhabitants. A land almost out of reach seemed a land of adventure and opportunity. So the island drew to itself a variety of peoples. The earliest inhabitants mentioned in history were wild tribes of hunters and fishers. A few settlements were perched on the uplands to avoid the swamps and forests of the more level stretches. Most of them were driven from their poor possessions by Celtic tribes that swept in a westward wave over Europe and were not stopped by the narrow channel of water. The Celts possessed the land for centuries. They made

use of the tin of Cornwall, not only in their own industries but also as a means of attracting traders from afar. But the Celts could not hold the land for their own. Julius Cæsar, and other Romans after him, took Roman legions to Great Britain and during five hundred years the Romans ruled and built there. After they withdrew, other invaders

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Fig. 105. England. Buckingham Palace, the royal residence in London.

from the continent entered Great Britain and pushed the Celts into the mountain regions of western Ireland, Wales, and northern Scotland. The Angles and Saxons came from what is now Germany; the daring Jutes came from Jutland; the hardy Danes and Norsemen came from Scandinavia. Later, the Normans came from across the English Channel. Considerable intermarriage took place between these invading races and the peoples they conquered. So the Englishman of our time is the descendant of a mixed race. Surely some of England's greatness is due to the fine qualities that have been built into her people through the many centuries.

Roman soldiers in the legions bound for Britain crossed to the southeast corner of the island. Ahead of them as

they sailed, they saw white headlands of chalk glistening in the sun. Landing perhaps at Dover, they found deep forests covering the greater part of the lowland areas. Rough tracks were the only roads. The inhabitants were unfriendly. How different will be our experience as we enter the England of today! We have heard that the English Channel is very rough, so we will choose a steamer that makes the shortest crossing. This is from Calais to Dover.

As we approach the shore, we see the same chalk cliffs the Romans saw. But when we enter the country, our view is different. We are in Kent, a district called "the Garden of England." There all is green; one green field adjoins another and green trees line the road. We pass small cultivated fields separated by well-trimmed hedges of green. Here and there fat sheep are grazing on the grassy chalk uplands which are called the "downs." Contented cattle are feeding on the lower meadow lands. We pass acres of hops with their greenish flowers, and no field is prettier than a hop field in bloom. There are many orchards, too, each tree carefully cultivated, and in the spring the air is fragrant with the odor of their flowers. Apricots, plums, nectarines, and grapes add their delicate blossoms and ripe fruit to the attractive landscape as the seasons change.

The meadows and fields are dotted with wild flowers; the sweet-smelling wild hyacinths appear early in the spring; the nectar-laden honeysuckles, the yellow primroses, and the tiny violets add beauty to the charming scene. The air is vocal with the songs of birds. The skylark, high above our heads, sings us his happiest melody; the cuckoo calls from his hidden place among the trees; and the nightingale's sweet song breaks the quiet of the evening hours.

The tenant farmers who inhabit this garden land live in the quaint thatched cottages we pass. Climbing ivy

and pretty flower gardens give the cottages a lovely setting. Near by are the thatch-roofed barns. "Wall-fruit" trees, like those seen in France, rest against the stone walls and flourish in the warm sunshine. Many of these cottage homes dot the landscape. We see a path "cutting across" the country. The path leads to a stile between two fields. A woman is just mounting the stile on her way to the home of one of her neighbors, where she will enjoy a leisurely chat.

Soon we come to a large estate of some wealthy family. Its many acres are enclosed by stone walls. If we go within the walls, we shall find an attractive old house surrounded by a great park. There are kitchen gardens to furnish the family with fresh vegetables, and hothouses to supply the home with flowers in the colder winter months. The family of this rich landowner has probably owned this estate and the surrounding acres for centuries. The land is rented out in small tracts to tenants and some of these have lived on the same piece of land for many generations.

Wandering farther from the coast, we come to the age-old town of Canterbury, one of the many cathedral towns of England. Its point of greatest interest is its beautiful old cathedral. Here, in early days, the old Roman road crossed the river Stour and a Roman town grew up on the site. Later, the town became the capital of the Saxon kingdom; a castle was built; and many people came to live within the protection of the castle. In the sixth century, missionaries came from Rome, were welcomed by the Saxon king, established their monastery there, and traveled among the heathen to christianize them. Still later, the great cathedral was built. Ever since those days, Canterbury has been an important religious center and the head of its cathedral is the head of the Church of England. Its old thirteenth-century cathedral, one of the most beautiful of all the beautiful old cathedrals in England, reminds one of the town's religious importance.

But Canterbury also became a market town many years ago. It is situated in the midst of what has been called "the orchard land" of England. When fruit was first raised in that region, those who had fruit to sell went to meet those who wished to buy fruit. Many roads crossed at Canterbury and the traders met there. Because many traders visited the town, inns were built and they served food and drink to the traders. Blacksmiths built forges and were ready to shoe the horses and repair the wagons. Other traders came and the town became more and more important as a trading center. Today Canterbury has corn, cattle, and hop markets, but many producers send their products to the large markets at London.

It was in Canterbury that the Flemish weavers took refuge when they were persecuted at home. Many of them lived along the river and there they carried on their work and started the weaving industry in England. So today, Canterbury is more than a typical cathedral town; it is a crossroads where people have passed for centuries.

As we travel from one part of rural England to another, the scene is very much the same as in Kent. We pass gray old castles half hidden among their trees. We go through many cathedral towns, each with its houses grouped about the old cathedral. We pass many fields of oats and barley and some wheat. Husky teamsters, in their smocked linen frocks, are walking beside their heavy wagons as the broad wheels grind over the road. We see many herds of swine. We see so many sheep that we soon decide that no English landscape is quite complete without them.

The raising of sheep has long been an important industry in England. In the Middle Ages, England was to the world what Australia is now as a source of raw wool. Then raw wool was the most important export which enabled the English to buy needed foods and luxuries abroad. Today, sheep graze on the dry chalky uplands, on the

wind-swept moors, and on other areas where the soil cannot support anything except a spare crop of grass. But modern England does not produce enough wool for her own use. Instead, she imports large quantities from

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FIG. 106. England. A typical scene in rural England.

Australia, New Zealand, and Argentina to supply her many factories.

In other parts of rural England one sees many dairy herds. Dairying is the most important industry in the rich valleys of the southwestern peninsula. Here, as in Brittany across the Channel, the west winds are laden with moisture and the heavy rainfall produces abundant pasturage. One also sees many dairy herds in the region which extends from central England to the region around Chester. Here there are many green meadows, but there

are also large fields of turnips and other root crops which supply additional food for the dairy cows. You have read of some of the dairy products which are shipped into England and you will read of others. Possibly you thought that England had no dairy herds of her own. But there are many dairy cows in this region and they supply fresh milk and cream to the large factory towns near by.

Some of the farmers of England raise grains for bread. The most important wheat region lies northeast of London and there are very good reasons for that. Wheat needs a fertile soil, moderate rainfall, and hot summers to ripen the grain. This region meets all these conditions, so wheat flourishes there. In general, we may say that the "wheat lands" of England lie in the southeastern half. But the English farms do not produce enough food for her dense population, although they raise a larger number of bushels per acre than are raised in the United States. In order to produce these large crops, the land is carefully fertilized and the crops rotated. Still, large quantities of wheat and other cereals have to be imported from the United States, Canada, Australia, and Argentina. Other foods are also imported. Sugar and fruit must be brought in to make jellies and jams, which many of the English have on their dining tables daily. Even vegetables come from abroad. You cannot think of one food which is not imported, although a part of the supply may be produced at home.

More food could be produced in England if the land were owned in small tracts and cultivated by the owners as in Denmark. Two-thirds of all the land of England and Wales is owned by 10,000 people. That leaves very little for the millions of the population. Some of these large estates are kept in park lands; other parts are rented to tenants. At present there is a heavy tax on these large estates and some of the owners are glad to sell off parts.

England is a very small country, only one-sixtieth of the size of our own United States. But in that one small

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FIG. 107. England. Thatching a stack of grain. The climate of England is very rainy. Why are the grain and straw stacks thatched in much the same way as the houses?

country live one-third as many people as live in our larger country. While we have an average of only thirty-five people to each square mile, in England there is an average of seven hundred to each square mile. It would be im-

possible for all these people to make a good living cultivating the soil. Even if all the soil were of the best and every acre used most carefully, it would still be impossible. Because of this, many English people work in factories and obtain foodstuffs and other necessities from foreign countries in exchange for their manufactured articles.

One reason for England's greatness as a manufacturing nation lies in the fact that manufacturing is necessary to support the population. But, though there may be people to work in factories and though it may be necessary for them to do this work, they will not necessarily become great manufacturers. The English have another advantage in the fact that valuable supplies of raw materials are near at hand. An abundance of raw wool gave the first start to the English manufacturing of woolen goods. The mines, too, contribute their products to keep great factories busy.

One more item is essential to greatness in manufacturing. There must be some power to run the machinery. Many cities have grown up beside rivers because the rivers furnished water power to run the factories. When machinery is run by steam, there must be fuel for the fires. English forests are too few and too precious to be much used for fuel. Now you will have guessed that coal is an important factor in manufacturing. Not even petroleum products rival coal in importance today.

Part of England's success as a busy manufacturing nation is due to her large quantities of coal. Look at your map and find the Pennine Hills of northern England. At the base of these uplands, toward the east, the south, and the west, are big coal fields. Smaller areas of coal are found in other parts of England. Near these coal mines are the greatest of England's manufacturing industries.

Southwest of the Pennine Hills is a region called "the Black Country." What picture do those words bring

to your mind? In this region there are valuable iron mines. A few centuries ago this area was covered by a great forest, and the wood helped to make the iron ore valuable. In those days, the charcoal burners were kept busy making charcoal to be used in smelting the iron. All of the work was done in the home foundries. Each smith worked at his own forge day after day, and turned out hand-made iron products.

The smelting of iron is still an important industry in this region. The forests are gone, but coal is close at hand. The scene is very different from that of the early days. The region is busy both below and above ground. Below the surface, thousands of "coal getters" are loosening the coal from its bed and sending the loaded cars up the shaft. The coal is dumped on waiting trains and day after day sent to the factory towns. At night, the flames from the iron smelters brighten the sky; by day, the dark clouds of smoke dull the brightness of the sun. As you go from place to place, you find your way between bare fields, piles of coal, cars loaded with iron ore, lime, or coke, and great heaps of slag, the refuse from the smelters.

Birmingham is the center of this coal and iron factory region, and goods from many near-by towns are marketed there. In this region, almost every town specializes in one line of work. One city is noted for the manufacture of bicycles and automobiles; another one for needles; still another for nails; one for locks, keys, etc.; and one for brass. Then there are cities which use the coal for manufacturing other things besides metal goods. One city is famous for its carpets, one for shoes, and another for harness and saddlery.

Birmingham is not on the sea, so you would not expect to find bulky objects manufactured there. Instead, the factory workers make small finished articles which can be shipped to a port at less cost than bulky ones.

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FIG. 103. England. A row of workingmen's houses in the outskirts of London. Here, as in other parts of the British Isles, the houses of the poorer people are built end to end to save the cost of one wall. Each chimney generally serves one household.

If you follow the Trent from the Black Country toward its source, you will find a region famous for another industry. This region is called "the potteries" and so you can guess what is manufactured there. In the early days, clay for making earthenware was found in this region. At first, wood and charcoal furnished the fuel for the home kilns. Now the coal mines in the region furnish the fuel and a better quality of clay is brought by canal from southwestern England. You can go along the Trent River for several miles and find people in five towns all making china and earthenware. Those towns are all joined and are called Stoke-upon-Trent.

The English make china and earthenware for the British Isles. They also make large quantities for export. Much of the best china which you can buy in the United States is made in England. Large quantities of the low-priced earthenware also come from "the potteries." Perhaps you have some china at home which was made in England.

Now let us travel to the eastern side of the southern Pennines. Here we shall find the largest coal field in the British Isles. Leeds and Sheffield are the two important manufacturing centers on this coal field. Each city is surrounded by many other factory cities.

Leeds is the center of the woolen industry, which is an age-old industry east of the Pennines. The grasslands of that region have long been used for sheep-raising. In early days the women carded, spun, and wove the wool. Finally woolen mills were built beside the streams which furnished water power and also pure water for washing the wool. But there were beds of coal under this region even at that time. Now the coal is mined and furnishes the power in the very region where there have been many generations of skilled workers. The mills have grown so much larger that it is necessary to import raw wool. Today Leeds is world-renowned for her beautiful woolen

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Fig. 129. England. London Bridge over the Thames River. This bridge does not open and so large boats cannot go up the river beyond this point. The smokestacks on some of the smaller boats are hinged and such boats can go under the bridge.

cloth. Bradford has important woolen and dye factories. Other towns are better known for their carpets and rugs. A little cotton and silk are manufactured, but wool is by far the most important textile in the region. These cities also make textile machinery.

Sheffield is the center of another industry. Iron and steel are manufactured into cutlery and other sharp-edged tools for which Sheffield is widely known. There is a very good reason why that particular industry developed there long ago. There was then plenty of wood to make charcoal; there was also iron ore; there were streams for running the forges and the grindstones and there was the special thing needed for making sharp-edged objects, the "millstone grit," a kind of sandstone used to make the grindstones. Have you ever turned a hand grindstone for your grandfather? If not, you have missed something, for it is great fun to turn the stone as you watch him press a scythe or other blade against it.

The factories are now so busy that both iron ore and pig iron are shipped into Sheffield. Much of it comes from Sweden. Besides the factories for making the edge-tools, there are also factories which make railway engines and coaches, boilers, steel plate for ships, guns, and armor plate.

Shipbuilding is another of England's industries using her coal and iron. To find the shipbuilders, you must go farther northeast, to the coal fields in the valley of the Tyne River. Newcastle is the heart of this region. Have you ever heard your mother say, "That is like carrying coals to Newcastle"? It is sometimes said when something very unnecessary is done. The saying sprang up because Newcastle had so much coal to ship away that, of course, it would be very foolish to take any coal there. Newcastle still has plenty of coal. She exports large quantities to other countries and also ships it to London.

But much of it she uses in her own iron and steel industries. Several iron and steel cities are built along the Tyne River, so close together that they seem like one city. Of all the steel industries, shipbuilding is most important, for this region is one of the most important shipbuilding regions in the world.

We must not fail to visit the manufacturing district that lies to the west of the Pennine Hills. We are interested in that region, for there much of the cotton raised in the United States is made into cotton goods. Suppose you board a freighter at Galveston or New Orleans and sail to England with a cargo of cotton. You will steam across the Atlantic, headed for Liverpool. In that harbor you will pass other boats loaded with cotton. If you look for vessels not carrying cotton you will find them, also. Some are loaded with wheat and other cereals; some are bringing in great timbers for use in the mines; others are filled with lumber; others are refrigerator boats carrying meat and other perishable foodstuffs; there are dirty tankers filled with petroleum; and there are other ships carrying copper, zinc, and lead from the United States to be used in the industries of central England. The flags on the ships tell you that these vessels are from many different lands. But you notice that most of them belong to the large merchant marine of England.

Your boat does not stay at the port of Liverpool, but enters the Manchester Ship Canal. This canal carries you thirty-five miles inland to Manchester, the center of this manufacturing region. As your boat ties up to the dock, the stevedores appear and soon the bales of cotton are being swung onto the dock. You notice several other vessels which are also unloading cotton while some are putting on cargoes of manufactured goods.

There must be some special reason why Manchester is the center of this most important cotton manufacturing

region in all the world. As you have already noticed, Manchester is near large coal mines. But this area made cotton goods long before coal was used to run steam engines. At first cotton was spun by machines which were run by the water power furnished by the swift upland streams. For this reason, the spinning mills were built at the foot of the uplands.

But why were most of the spinning mills built on the west side instead of on the east side of the uplands, only a very short distance away? It is because the climate on the west side is more suited to the spinning of cotton. The westerly winds which blow from the Atlantic carry a large amount of moisture. As the winds blow toward the mountains and the air rises to cross them, some of the water vapor is condensed. More rain falls and the air has more moisture than on the east side. This moisture keeps the short, fine cotton fibers from parting and breaking so that they can be spun into the finest of yarn. Do you wonder that one after another of the spinning companies built their factories in the Manchester region?

At first the weaving of cotton was done on hand looms. When steam-driven machines for weaving were invented, the weaving-sheds were built on the edge of the neighboring coal fields. Today some of the towns near Manchester may be called spinning towns because most of their factories spin the cotton threads. Other towns may be called weaving towns, for in those the different grades of cotton goods are woven.

Cotton goods are not ready for sale when the cotton has been spun and woven. Much of it is bleached, dyed, and printed. So there are other towns in which the cotton goods are finished. Most of the towns in which the bleaching, dyeing and printing are done are located in the upper parts of the valleys where there is plenty of pure water for the factories.

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FIG. 110. England. Houses of Parliament on the Thames River and Westminster Abbey in the background.

Rudyard Kipling died Jan. 1936 buried in Poets Corner, Westminster Abbey Jan. 21, 1936 cremated.

So you see that the cotton which traveled across the ocean to reach its first factory may still continue its travels. It may be taken from Manchester to Oldham or some other spinning town. Then the thread may be sent to Blackburn where it is made into yard goods; or it might be sent to Preston where it is made into sheeting. Even then most of it is not completed. Much of the sheeting is sent to some town where it is bleached; other pieces of cotton goods are sent to towns where they are printed, as calico, percale, etc. Some of it is sent to factories to be dyed, such as the plain-colored sateens and voiles.

When these cotton goods are ready to be sold, most of them are sent back to the great warehouses in Manchester. There they are sorted and packed and are ready to be exported. Although England does not raise an ounce of cotton, she sends her manufactured cottons around the world. Which parts of the British Empire import manufactured cotton from England?

Other industries would naturally spring up in this region because of the cotton industry. There are factories for making textile machinery and they make it so successfully that other countries buy it. Then there are towns in the Manchester region in which dyes are made and where chemical industries flourish. You would not care to live near those towns, for they are filled with smoke and foul-smelling fumes which have killed much of the vegetation.

Do you wonder that cotton is the most important topic discussed in this region? If you lived there, your father would probably be employed in some part of the cotton industry; your grandfather might also be employed in it; possibly your mother and your brothers and sisters would be working in the cotton mills; and when you grew a little older you might do the same kind of work. Cotton is king in our South because we raise large quantities of it.

Cotton is also king in the Manchester region, but for a different reason.

If some day you are a buyer of cotton you will probably visit Manchester; if you are buying china you will go to Stoke-upon-Trent; if you wish to secure various kinds of hardware you will go to Birmingham; for woolen goods you will go to Leeds; for cutlery to Sheffield.

Many of these manufactured products are sold in foreign lands. England sells us cotton and woolen goods. The money received as pay is used to buy our cotton, meat, or wheat. England imports many of the raw products for her factories; then she sells her manufactured goods all over the world. Most of her people live on the wages received for factory work.

Would you like to collect advertisements of English manufactured goods? Find as many as you can, sort them, and mount them on posters.

One of England's resources lies just off the border of the island. The waters of the North Sea are quite shallow, especially above the Dogger Banks, a large submarine plateau in the middle of the North Sea. These shallow waters make excellent feeding grounds for fish. For many centuries, the Dogger Banks have been the great fishing ground for all the surrounding countries. The busy island we are studying has turned here to find part of her necessary food supply.

Fishermen come from all the coasts of the British Isles. In the early days they set out from the shore with two or three men in a sailing boat. They guided their boats skillfully across the waters to the fishing grounds. After they had made their catch, they returned home. Often the fishermen were overtaken by a storm and too often their boats capsized and the fishermen were drowned. This was a hard and dangerous life and only the sturdy and brave could become fishermen.

Much fishing is still done along the coast in small sailing vessels. But most of the fishing in the best fishing grounds is done with steam vessels. The nets are let down and when they are full they are hauled in by large engines. These ships are so large and expensive that they are not owned by the fishermen but by a company. These companies sometimes send smaller vessels back and forth to carry the day's catch to land. Sometimes the large boats carry ice on which the fish can be kept for several days.

If you were to visit Grimsby, Hull, or Aberdeen you would probably see men landing large quantities of fish. These fish are either cured there or packed for shipment to the inland towns of Great Britain and to the continent of Europe.

For generations these brave people have been fishermen. Sons of fishermen look forward to the time when they can make their first fishing trips. They learn to love the sea more than they love the land. Because they are familiar with the sea, many of these sons leave their fishing boats to sail under the British flag to more distant seas.

British seamen ride the seas on two quite different errands. Many of them belong to the British navy, for Great Britain possesses the largest navy in the world. You can find many reasons why England needs a large reserve of men and money for naval uses. But warships do not transport necessary foods and raw materials from foreign countries or take to market the products of English mines and factories. Because of these needs, Great Britain has developed also the largest merchant marine in the world.

An island race must always travel by water. There are other reasons, however, why England has become great upon the sea. Study your map to find some of these reasons. The British Isles face Europe and also the Atlantic Ocean. The two sides of the island nearest the mainland approach it very closely, especially in the

southeast. The shores of the mainland are dotted with good harbors and cut by the mouths of rivers that can be followed far into the heart of the continent. Short voyages from the shores of the continent lead to the Thames and to eastern and southern ports. The other two sides of the British Isles face the great Atlantic Ocean. You can understand the position better if you use a globe instead of a map. Traffic to northern Europe from North America, from South America, from Africa and from the far East must pass the British Isles. We have seen some reasons why it may stop there. Now notice the three channels of entry. Many ships go in at the English Channel and they have made Portsmouth and Southampton important port towns. Many take the middle door and enter the well-protected Irish Sea by St. George's Channel. Others enter the Irish Sea by a sort of back door, passing north of Ireland and west of Scotland. Could any country be better fitted by its position to be the ruler of the seas?

Many of the ships that enter the Irish Sea go to the port of Liverpool. You passed this way as you went to Manchester with a cotton cargo. Liverpool is the port that serves not only Manchester and the cotton mill district but also the Black Country around Birmingham. In fact, it serves all England for transport of passengers in and out of the country, for receiving a large variety of imports, and for shipping products in exchange. But Liverpool is more than a port. Both Liverpool and Manchester have factories for making many of the products used in the region. The most important are the large flour mills for grinding the wheat and other cereals imported to feed the large population. Liverpool, like Manchester, has about three-quarters of a million inhabitants, and several millions more live in the neighboring towns.

A large part of England's greatness centers in her great

city on the Thames. A railroad map of England makes London look like the pivot around which the whole country swings. Its position at the heart of the world's greatest commercial nation has forced it to outgrow the other cities of Europe, and it is too old to feel the rivalry of a New World city like New York.

London seems almost as "old as the hills." No one knows when the first settlement was made on that site, but we do know that when the Romans came to Britain in the first century they found a flourishing little town there. Let us see if there is a reason why this small beginning should have become a world metropolis.

The Romans landed on the southeastern shores and advanced northward and westward through the forest and over the dry chalk hills overlooking the Thames Valley. Here they saw a large marsh stretching north and east for many miles. Here and there were lagoons and ponds in the marshes. Tall rushes and salt meadow grass grew between the lagoons. The invaders knew they could not cross the marshes. So they traveled westward until they came to the place where solid earth formed the banks of the Thames. This had been a crossing place for many years and on the north bank a prosperous little settlement had grown up. The Romans took possession of this town and helped to make it the great London of our day. They built a fort there and surrounded the town with a strong wall, so that the people gathered in the town for protection. From the landing places on the Channel shore, the roads ran to a common meeting point at London, where it was possible to cross the river. From the same point roads were built out in fan-like arrangement to carry Roman soldiers and traders to the far north and west of England. So you see one reason why London became a great city. London Bridge is still much needed, and we hope it is not "falling down."

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FIG. 111. England. The Paddington railway station in London. If you wish to go by train to London, you buy a ticket to Paddington or one of the other railway stations, not to London. Each coach is divided into compartments which are entered from the steps which extend along the side. There are seven doors to each of these coaches. Imagine the picture when the train stops and all the doors open. A few of the newer coaches in the British Isles are built more like our own.

You will see another advantage in London's location if you follow in imagination those invaders who pushed their boats up the flat, broad windings of the Thames to find a convenient landing place on its shores. The marshes gave them no friendly welcome, and they were obliged to proceed to the same narrowing of the river at London. Can you find in this fact the beginning of London's importance as a seaport? Those invaders who first took the town and fortified it had also chosen the place at which the advance of other invaders could be most easily stopped. It was the doorway to the interior, and the need of keeping the door locked gave London early military importance.

Still, London remained a small city until the middle of the sixteenth century. Around the city, thousands of sheep grazed in the rich valley of the Thames. Across the English Channel were the Low Countries, now Belgium and the Netherlands, where many weavers were busy weaving cloth on their hand looms. These weavers bought most of their wool in England. The merchants traveled from England southward to sell their wool to the weavers of the Low Countries; other merchants from the Low Countries came to England to sell their woven goods; still other merchants brought spices and other Oriental products to their English customers; devout men made pilgrimages from England to Rome and returned home again. Many of these people had to cross the Thames River. The marshes were not easy to cross, so they crossed at London, and London grew.

Then came the time when Spain conquered the Low Countries. This fact would hardly seem important to the growth of London, but it was. Because the Spanish treated the Flemish people of the Low Countries very cruelly, many of them fled from their native land and settled in England. Many of these were skilled weavers

who went to London and set up their looms. In this way, a large weaving industry was established in London and other parts of England.

What we know as the city of London is really a county. At its heart is what the Londoner calls "The City," which corresponds to the old walled town. The walls have disappeared and the district is crowded with many important business places. Within this small area you might visit the famous Bank of England, the Royal Exchange, the General Post Office, and shops and offices representing every line of industry. One of its streets is the well-known Cheapside, and its short eastern continuation called the Poultry. The word "cheap" is from an Old English word which means trading or bargaining. The modern Cheapside, with its shopping opportunities, occupies the space which was once a public market where buying and selling were carried on under the open sky. The names of the cross streets in the neighborhood still point out the old locations of the stalls or trading groups. There are streets named Wood, Bread, and Honey. Ironmonger is another, and Old Jewry marks the place where the Jews had the center of their thriving business. Paternoster Row is so named because prayer books and rosaries were there offered for sale. John Gilpin, when he took the wild ride of the ballad, raced down Cheapside. What he might have seen along that street was quite different from the handsome shops of more modern times.

Also within the limits of "The City" is the Mansion House in which each Lord Mayor lives during the year for which he is elected Mayor of the City of London. Thousands of people work in "The City" all day. But at the close of the day the subways, trains, and busses are crowded with people going to their homes in the suburbs. Less than 30,000 people really live in this smaller "City of London."

But the City of London is not the real London of today. It is only a small part of it. Today London includes twenty-eight boroughs such as Paddington, City of Westminster, Greenwich, etc., in addition to the City of London. Did you ever hear of a city having twenty-nine mayors? Each of these boroughs has a mayor and so London has twenty-nine. But even the County of London does not include all of Greater London. As you travel out of the county you find that the houses are built just as near together as they are within the county. You are in the suburbs, but much of this territory is in the city police area, and so is called a part of Greater London. The population of Greater London is almost seven million. How does New York's population compare with that figure?

Would you like to take a trip about London? Let us start at the Tower of London, beside the Tower Bridge which crosses the Thames. This tower is really not a tower at all; it is an old fort and castle; in fact, it seems to be several old palaces combined and covers thirteen acres of land. It is still surrounded by a high wall but the moat is dry. You pass the guards dressed as yeomen of long ago and you hear some one say that they are called Beefeaters. That seems very strange to you, but you are told that they are called Beefeaters because in the Middle Ages, when kings were always in fear of being murdered, these guards were the tasters of the food for the king and queen. The Tower of London has a very tragic history. It was used as a prison and many famous men and women have had to face the executioner there. Today it has a happier lot, for it is used as an arsenal and a showplace. The Tower really has thirteen towers. You would like to visit the Wakefield Tower and see many of the crown jewels. There are thousands of precious stones kept there, diamonds, rubies, pearls, and sapphires. But some of

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FIG. 112. England. London Tower and Tower Bridge. The Tower Bridge is one of the newest bridges across the Thames. Its central span can be raised to permit ships to pass. London Bridge, which is a short distance up the river, is the oldest bridge across the Thames.

the stones which you see are really only imitations and the real stones are kept in Buckingham Palace, a royal residence, and in other places. The boys would be especially anxious to visit the White Tower, for there they would see a large collection of armor and weapons showing the different kinds used during many centuries. Some of this armor is on figures mounted on wooden horses which are also covered with armor and trappings.

Another famous old building is St. Paul's Church. This church was destroyed by a great fire in 1666 and rebuilt with money raised by taxing all coal which came into London. This church is one of the largest churches in the world and contains the statues of many famous men. Right near St. Paul's, on Cheapside, is the famous Bow Church, so called from the bow-shaped arches on which it is built. To be born within the sound of Bow Bells is said to be the "birth certificate" of a true Londoner.

London, like other towns famous for manufacturing in the Middle Ages, has its old guildhall. There the Lord Mayor, who is always a member of the guilds, takes his office, and there the County Council meets. On Lord Mayor's Day, November 9, a great banquet for the chief officers of London is given at the guildhall. This is a very important occasion and the banquet is served on gold service. It is at this time that the Prime Minister makes a speech outlining the plans of the government for the year. Because the British Empire reaches to all corners of the world, all countries are interested in that speech. The King of England is never invited to this banquet but the Prince of Wales sometimes attends.

Up-river from the City of London is the City of Westminster. In this division of London we will visit Westminster Abbey. In this beautiful thirteenth-century abbey, the English monarchs are crowned. There, too, many famous men are buried. Beside the abbey, and facing

the Thames, are the large Parliament Buildings. Look at the highest tower, and if the Union Jack is floating there in the daytime Parliament is in session; if at night a light is shining from the Clock Tower it is also in session. Listen! The bell in the Clock Tower, Big Ben,

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FIG. 113. England. Westminster Abbey. Here you could visit the Poets' Corner and see a bust of Longfellow. In this wonderful old building the kings and queens of England are married and England's great are laid to rest.

is ringing and its tones can be heard throughout the city. More than that, people in the far corners of the island may be hearing Big Ben by the help of their radio outfits.

There are 11,000 rooms in the Parliament buildings, many of them filled with costly paintings and statues of the sovereigns. But you would like most to visit two rooms. One is called the House of Commons and the

other the House of Lords. The one room, the House of Commons, is used for the meeting of the lower house of Parliament.

The room where the House of Lords meets is much more beautifully furnished. All who belong to the House of Lords are of the nobility. There are dukes, earls, viscounts, marquises, and barons. When any one of them dies, his place is taken by his oldest son or heir. When the heir first takes his place in the House of Lords, he is received into the House with an elaborate ceremony and each member is gay in bright-colored robes. Look at the furniture in the room. In front is a tall throne for the King; on one side is a smaller throne for the Queen; and on the other side is a throne for the Prince of Wales. What is that cushioned footstool in front of the throne? That is the Lord Chancellor's "woolsack." About four hundred years ago, when Queen Elizabeth was reigning, wool was the most important resource of England. Because of this a law was passed forbidding the export of wool from the country. In order to be constantly reminded of this law, the Lord Chancellor and the judges were each required to sit upon a "woolsack." One of the most charming things about England is that it likes to keep its old customs, and so the "woolsack" is still seen in the House of Lords.

In the West End of London, beyond the buildings of which you have read, are many other interesting places. There is Buckingham Palace which is the King's home. There are famous picture galleries and museums. Here, too, are the city homes of some of the nobility and professional people. Most of the houses are surrounded by pretty lawns and gardens. There are several parks, too. Would you like to visit Hyde Park and ride along Rotten Row? This is covered with tan bark to permit horseback riding in the heart of London. Of all the parks,

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FIG. 114. England. This picture shows a part of the Thames embankment. Much of the land along the Thames River was originally low marsh land. A concrete embankment has been built along each side of the river and the land drained and filled in. Notice Cleopatra's Needle, brought from Egypt, standing on the edge of the embankment.

you would find the Kew gardens the most interesting, for there they have collected plants from all the world. There are miles of walks and drives, hot-houses filled with all varieties of ferns, others filled with the rare pitcher-plants, and still others filled with delicate orchids. There is a large collection of cactus plants, a palm house, and a water-lily house. You can look through an avenue of Irish yew trees and see a Chinese pagoda. You can stand at the edge of a pond and watch the strange antics of the birds. There are so many plants to see in these gardens, besides the strange animals, that you feel as if you would like to stay in London for a whole year and spend one day of each week in the Kew gardens among the plants of all the world.

London is so large and has so many interesting places for people to visit that transportation is a very important problem. You look for the street cars, but the streets are narrow and very busy, so that you see few of them. Those street cars that you do see are double-deckers and if you wish to ride on the top you will have to climb up a narrow stairway. Possibly you would prefer to ride on one of the auto-busses. They are also double-deckers which will carry you all about London. You can do a great deal of sight-seeing from the top deck. You are surprised to find that London does not build tall sky-scrapers such as you see in New York. The streets are so crowded that you wonder if the driver can get through. You are very glad that London is not having one of its fogs, for then you would not be able to do any sight-seeing.

London is such an old city that each nook and corner seems to have an interesting history. But London is also an important port and manufacturing center. It is situated sixty miles from the sea, at the head of tidal water. The Thames estuary has a double tide. A great tidal wave comes across the ocean twice every twenty-four hours.

One crest comes eastward through the English Channel. Another crest, which really started twelve hours earlier, comes southward in the North Sea. These two crests meet at the mouth of the Thames and come as a great wave up the river. Every day large boats come up the Thames Channel with the tide. It is estimated that on an average a boat comes up the Thames River every ten minutes.

Boats from all the ports of the world enter the London harbor and the Thames is lined with miles of docks. From the London Bridge the great docks extend down the river for about thirty-five miles. Many of the large companies own their own docks. This is true of the East India and West India companies. Besides others there are the Victoria and the Royal Albert docks, at which products from Australia and Asia are unloaded. One of the smallest docks is the London Docks.

The London Docks are very different from most of the docks that you have seen. They are known as closed docks and are reached by means of locks. You will have to leave the main channel of the river if you wish to visit any of the largest docks. You remember that there were great swamps on both sides of the Thames River. Portions of this swampy area have been dredged out and great basins made. If a large steamer is to go to London, it passes up the main river and then turns into the narrow channel leading to the basin of the London Docks. There it draws up alongside the quays and unloads. All the docks together cover an area equal to 645 acres. Can you tell in what way these inclosed docks are better than those along the edge of the river? In what way was the land particularly suited to the building of these inclosed docks?

As the docks are in the East End of London, many of the factories are also located there. Cattle are landed at the large packing plants, the meat is prepared for the

market, and the hides are tanned for the leather industries. Oils are brought there and large quantities of soap are made. There are large breweries where the hops from the fields of southeastern England are used in making beer, the common drink of the working people. There are also engineering works, shipbuilding yards, potteries, paper mills, and chemical and match factories. London is the most important manufacturing city in all England, although there is neither coal nor iron found in the region. However, like Paris, her large population furnishes the many workers needed in the factories and also a large market for the manufactured goods. You have learned other reasons why London can reach a large area to market her manufactures.

Because the factories, docks, and warehouses are in the East End of London, most of the people who work in those places live there also. There the streets are often narrow and dirty and household conditions unsanitary. There is little in them to remind one of all the beauties of the West End.

We have enlarged our picture of England's capital from the "City of London" to the county of London and then to Greater London. We might stretch it once more. In a sense, all England may be divided into the "London end and the other end." A line drawn from the mouth of the Severn to the Wash lies between two regions quite unlike each other. Southeast of the line, life centers in London. The roads and railroads lead to the city. The main interest of the people is commercial. The towns are inhabited by people whose business interests are largely in the capital. Northwest of the line lies industrial England. Here the main interest is manufacturing and life is different accordingly. But each region contributes its share to the greatness of a great country.

SCOTLAND

As you read about the Scotland of today, you will see that the thistle is its suitable emblem. The beauty of the thistle's blossom suggests the beauty of Scotland's lakes and glens and mountains; the thorns that make the thistle a bit difficult to know are fitting reminders of the ruggedness and bleakness and infertility that have been real difficulties to the inhabitants of the "bonnie" land. Let us see what sort of country is the home of the canny Scots.

We shall find that Scotland has been divided by nature into three parts. There are the northern highlands, the midland valley, and the southern uplands. A long time ago a great break, called a fault, took place in the block of hard rock which makes up Scotland. This fault extended from north of Dumbarton on the west coast to near Stonehaven on the east coast. Another great fault took place parallel to the first and south of it. This second fault extended from south of Ayr to near Dunbar. Then what do you think happened to the great block of land between these two faults? It slipped down and became the midland valley. A valley which is made in this way is called a rift valley and this one is called the Scottish rift valley. Now the region is a fertile plain intersected by hills.

For many centuries this lowland belt has been the most fertile area in Scotland and most of the people live in this region. Here, especially in the drier eastern part, one sees rich fields of root-crops, oats, and some barley. Very little wheat is raised in Scotland, for here, as in many parts of England, the climate is too cloudy and rainy. The only important cereal crop in this country is oats. Oatmeal porridge, or what you call oatmeal mush, is the common breakfast food of the Scotch. Their bread, which they call bannock, is also made of oatmeal, and if you were

to see it you would not even guess that it is bread. It is made of oatmeal mixed with water and is baked in cakes the size of a dinner plate and as flat as a pancake. This oatmeal bread is still in common use in the rural districts, but many of the Scotch people use bread made of other cereals which have been imported into the country.

Some land in the midland valley that cannot well be used for cultivated crops is made valuable by using it for pasture. The wetness which makes it impossible to raise wheat makes grass grow abundantly. Cows graze upon the meadow lands and furnish dairy products to the cities. On the drier hillsides there are flocks of sheep which furnish wool for the age-old woolen industries.

The greatest wealth of this rich midland valley, however, is not in the fertile fields. It is in the coal mines, which are among the richest in the British Isles. It is largely because of these coal mines and adjoining iron mines that most of the Scotch people live in the midland valley. The center of the coal and iron industries is Glasgow. A long time ago, Glasgow was a small city situated on the Clyde River, which in places was only fifteen inches deep. Then coal was discovered and business increased so that the citizens of Glasgow saw their need of a deep harbor. So they built walls along the stream and began dredging. Now the river is nowhere less than twenty-two feet deep even at low tide, and at high tide vessels which draw more water can enter the harbor. It has been said, "The citizens of Glasgow made the Clyde River and the Clyde River made Glasgow." That is just about what has happened. Now the Clyde Valley is the center of important industries and Glasgow ranks second among the important cities of the British Isles.

Glasgow is like Liverpool, Manchester, and Birmingham combined. It is a port like Liverpool, it makes textiles

like Manchester, and iron and steel goods like Birmingham. If you will look at your map you will notice that while it is an Atlantic port, Glasgow is really many miles from the sea and in the heart of the country. In fact, Glasgow is only twenty miles from a North Sea port by way of the canal which runs through the lowland.

Glasgow is the center of a great iron and steel industry. As you travel around the factory section you see large smelters turning the iron ore into pig iron. Then there are steel mills where quantities of steel are being made. Farther on, there are factories making machinery for the woolen and the cotton mills of Scotland. There are others making steel for bridges and buildings. But the most important industry connected with iron and steel is shipbuilding. Ships are built not only at Glasgow, but also at other cities farther down the Clyde. There you see miles and miles of shipbuilding yards in which are made all kinds of ships, from the sportsman's yacht to the great ocean vessel. In fact, there is more shipbuilding along the Clyde River than in any other equal area in the world, and each year the Scottish shipbuilders turn out about a half million tons of shipping.

Because the region around Glasgow has an abundance of coal, other industries besides those using iron and steel have developed. There are large factories for manufacturing woolen cloth. There are other factories which import large quantities of cotton direct from the United States and make cotton goods. In the region around Glasgow the climate is similar to that of the great cotton center of Manchester, and the cotton factories make cotton thread and many other kinds of cotton goods. Glasgow also imports wheat and corn and her mills turn them into flour to feed her factory workers. Raw sugar is imported and refined in her factories. Whisky, carpets, glass, paper, and many other things are manufactured in the

Clyde region. Because of her position, Glasgow can import large quantities of raw material on cheap water routes and after turning them into manufactured products, ship them to foreign countries. How many reasons can you give now for saying that the Clyde made Glasgow?

There are other industrial centers near the smaller coal fields in this midland valley. Dunfermline, north of the Firth of Forth, is noted for the manufacture of linen. The linen industry began in this region in the days when each family raised its own flax and wove the linen on its own home loom. When coal came into use, the work was done in factories and now the table linen of Dunfermline is famous. Another interesting industry grew up near by. At first oilcloth was made by covering a linen or jute fabric with a preparation of linseed oil. Later, linoleum was made, the linseed oil being mixed with pulverized cork imported from Spain. Other centers on the east coast of this midland valley used the cheap coal for making jute bags from jute imported from India. Now thousands of jute bags and much coarse material are manufactured in this region, as well as sails and ropes from better material. Can you see any reason why the eastern cities manufactured linen while the western ones manufactured cotton?

Edinburgh, the capital of Scotland, is also situated in this prosperous midland valley, but very near the southern uplands. Tennyson called Edinburgh "the gray capital of the North." The city is often hidden in the typical Scotch mist, though the western coast has more mists and heavier rain than the eastern side. Edinburgh is an old city, and was chosen as the residence of the king in very early days. At that time the English and the Scotch were enemies and many battles were fought on the border between the two countries. A strip of level country on the east coast was the route usually taken by the invading armies. A rocky hill overlooked this narrow strip of low-

land country and on this steep volcanic rock the Scottish kings built a castle fortress. From their commanding position on the high hill, the Scottish soldiers could see the approaching enemy and if necessary could find refuge behind the stone walls.

Although Scotland and England were united more than three centuries ago and the warfare has long since ceased,

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FIG. 115. Scotland. The old castle in Edinburgh. This castle is on a steep hill and overlooks the city. Why was this castle built here?

the old castle still stands on the hill. If you wish you may visit it some afternoon and see some of the Scotch soldiers drilling. Then you will think you are really in Scotland, for they will be playing their bagpipes and they will be dressed in their Scotch plaids. Did you think that all the Scotch wear the highland costume? No, you might travel all over Scotland and see few people wearing the old highland plaids. So you would be glad to see these

soldiers who not only dress in these costumes on the afternoon parade but go to war in the same. If you wish, you may visit the castle dungeons, the old parliament hall, or even the room where James VI, the son of Mary Queen of Scots, was born.

In the valley below the Castle Rock, the old Scotch kings built a palace called Holyrood Palace. The palace

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FIG. 116. Scotland. A Highland regiment led by a bagpipers' band. In what way is the background of this picture typical of Scotland?

was the scene of most of their pleasure, as the castle was their stronghold in time of danger. The street connecting the castle and the palace is called the Royal Mile or the Kings' Way. It extends through the old town and you would like to walk this Royal Mile, see the tall old houses lining the narrow streets, follow some of the narrow winding entries, called closes, and possibly stop at the old church of St. Giles where many Scotch heroes are buried.

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FIG. 117. Scotland. Holyrood Palace. In olden times this palace was the residence of kings and queens. In front of the palace are modern buildings. What does this picture tell you about the character of the country?

The larger part of Edinburgh is New Town, the center of Scotch culture. Its most beautiful street is Princes Street, which divides the old town from the new and is called a one-sided street. Along one side there are beautiful buildings, shops, and cafés. The other side is left open for monuments, a few public buildings, and parks. In Edinburgh you can visit the University of Edinburgh, one of the four Scotch universities, and the Royal Scottish Museum.

Edinburgh is less than half as large as Glasgow and is not so important in manufacturing. However, it has some important industries. The hills to the south furnish pure water; paper pulp can be brought from Norway; because of these and other favorable conditions large quantities of paper are manufactured. Edinburgh is also an important book-publishing center, and has long been known as the intellectual center of Scotland. Partly because of the supply of pure water, brewing and distilling are also important industries and many barrels are made for holding liquor. Most of the imports and exports of Edinburgh go through the near-by harbor of Leith.

South of the midland valley of Scotland is the beautiful region called the southern uplands. Here the mountains are not so rugged as they are in the north. Their granite tops were smoothed and rounded off by the glaciers which traveled over them during the Ice Age. Now these curved tops are covered with purple heather while the slopes are rich in grass. From the top of one of the higher hills you can look for many miles from hill to hill and across the valleys between. Few trees obstruct your view, for few are found except along the sheltered valley bottoms. Along the coasts are lowlands where farmers raise oats and turnips for their cattle.

This upland region is really the region of the shepherd. During the warlike Middle Ages shepherds tended their flocks on these grassy slopes. For many centuries these

shepherds have been the real Scotchmen of these hills. In the days past, when the sheep were ready for market, these shepherds combined their flocks and, with their faithful Scotch collies as helpers, started the big drove of sheep over the old droveroads toward the market in England. Those old droveroads are now overgrown with heather, but the hills are still covered with sheep. Now the sheep are driven to the nearest railway station and are sent by rail to the markets. In the three counties in southeastern Scotland there are more sheep to the square mile than in any other part of the British Isles. In that region the woolen industry had an early start. There was plenty of water for washing wool, swift streams to furnish power to run the machinery of woolen mills, and many sheep to furnish the soft fleeces. Now coal is used in the factories, large quantities of wool are imported from Australia and other countries, and the woolen industry still continues. This woolen industry is in the valley of the Tweed River and its tributaries. Have you ever heard of Scotch tweed cloth? Can you think why it is called tweed? It was first made in the Tweed Valley, but it became so famous that it is now made in other places also.

The northern highlands are the most romantic part of Scotland; they are the part that you would probably like most to see, though you probably would not care to stay there all the year around. These highlands cover more than one-half of Scotland.

When the Romans invaded England, they conquered southern Scotland, and built their northernmost wall across the narrow neck of land between the Firth of Clyde and the Firth of Forth. The Roman influence did not extend over the rugged highlands north of this wall.

These highlands are a region of bold mountain peaks, castled summits, barren crags, and heather-covered hill-

tops. Swift streams flow through the valleys and furnish trout and salmon for the sportsman. Foaming cascades delight the eye and ear. The narrow valleys in the highland region furnish protection for the few trees which

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FIG. 118. Scotland. This scene is in the most beautiful part of the Scottish Highlands. The road, beside Loch Katrine, leads to Ben Venue. The city of Glasgow draws a large part of its water supply through a tunnel from Loch Katrine.

grow there. Only along the eastern coast are there rich lowlands with many fertile farms.

These highlands were once the homes of the highland chieftains. Among the bleak hilltops, on the edge of some grassy tract, each chieftain had his home and ruled his clan. The clans were separated from each other by deep ravines and steep mountains. Sometimes they fought

with each other, but when trouble occurred with the people of the lowlands all the highland chiefs united against the lowlanders. Because the highlanders were separated from the lowlanders, they kept their old Gaelic language instead of the English. Even today, especially in the western part and in the many islands, the Gaelic language is the language used.

Today this highland region is the playground of Great Britain. Some of the estates are still in the hands of old highland families; others have been bought by men from other parts of the British Isles and even from the United States. These men own their estates for the hunting, fishing, and other sports they afford. Others, the old Scottish owners, rent their streams to fishermen for catching salmon and trout, and their lands for hunting. In a London railway station just before the hunting season in the Highlands opens, you can see many hunters leaving for the north. On the track you might see a long train labeled "Through train to Inverness" or some other northern point. The porters are carrying guns and all sorts of baggage. The hunting dogs are yelping and pulling at their leashes as they are taken to the baggage car. Whole families, with their servants, board the train, for many of these hunters maintain their entire household in the Highlands during the hunting season. You wonder if there will be enough game for all these hunters.

When the hunters and their families reach the Highlands, many live in the homes on the old estates. They hire men and boys from the surrounding regions to carry their guns. When the morning of the open season comes they are all ready. Then let the grouse beware! During the summer the young grouse have been feeding on the abundant heather, which, although of no value for raising sheep or cattle, furnishes excellent food for grouse. Now the hunting dogs are busy. They go ahead scenting for

any trail of grouse and watching for any motion in the heather. When a covey of grouse is seen, they "point" and the hunter knows he is near game. The dogs creep nearer; the grouse know they are seen; the entire covey takes to flight; bang go the guns! Some of them fall! That night the family has grouse for dinner.

Later in the season, the hunters stalk the red deer. All game is carefully protected by law except during a short open season. So much pasture land is being turned into deer forests that sheep raising is becoming less important in the highlands. Many a man profits by the fresh air of the high altitude and the wild scenery that he has enjoyed, as well as by the exercise of walking over the rough hillsides. In the winter time much of the highland area is covered with snow and the families are glad to be back in the warmer south.

Most of the Scots who live in the northern part of the country live along the eastern lowlands. Locate the city of Aberdeen and the Dee and Don Rivers on your map, for that is the most fertile area. The valleys of the Dee and Don raise more oats and more cattle in a given area than any other part of Scotland.

There is another type of Scotch people living in the Highlands, especially in the western part and in the near-by islands. These people are called crofters because they live on tiny tracts of land which are called crofts. Traveling through the region, away from the railroads, you come to a rude stone hut on a bleak hillside. There are only one or two rooms, roofed against rain and snow with a thatch of heather. As you enter, you notice the peat fire burning on some stones in the center of the room. Above the fire hangs a black kettle in which the family porridge is cooked or the potatoes boiled. The odor of peat smoke fills the room, for in many of these crofters' homes there are no chimneys. Only a hole in the roof furnishes a place

for the smoke to escape unless the door happens to be ajar. On a small patch of ground outside, the crofter raises potatoes and oats. A few chickens run around the dooryard and in cold weather share the crofter's home. There is a cow to furnish milk and butter. On the

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FIG. 119. Scotland. The kitchen of a prosperous crofter. Notice the flagstone floor, the fire of peat, and the "swee" which swings back and forth and from which the kettle is hung.

hillside, the crofter grazes a few sheep, and these furnish the wool for the main home industry.

In one corner of the room you notice a loom. Here the crofter makes homespun for the family clothes and also tweeds and other grades of woolen goods for sale. You can always tell the crofters' cloth, for it has the odor of the peat smoke in the midst of which it was woven.

Why do the crofters use peat for fuel? There are few trees on the Highlands and most of the crofters live far

away from the railroads which could bring them coal. Even if they could get coal, few could afford to buy it, for most of them rent the few acres on which they live and are very poor. So they use peat.

Peat is formed in valleys where the water does not drain away rapidly. Each year there is a growth of plants

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FIG. 120. Scotland. Bringing home peat, which is the fuel of the poorer people.

which dries up in the fall. The next summer another layer of plants grows. As each layer dies down it is added to the layer underneath. This goes on year after year until this partly decayed vegetation may be several feet thick. Sometimes as much as four inches of this peat is formed in one season. The lower layers generally make the best fuel.

When the crofter wants a supply of peat, he goes to the peat bogs with a spade and cuts out blocks of it. Then he or his wife and children set them in the sun to dry.

Often the women carry the peat home. You see them trudging along the pathway with huge baskets on their backs. They stop to rest and lean the baskets against a bowlder on the hillside. But even in their resting moments they are busy with their knitting. Beside their house they pile a large stack of peat, for they must have a supply for the cold winter.

Some of the crofters who live along the sea are fishermen. Others increase their earnings by making wicker creels for the herring fishermen. The crofters in the Shetland Islands make pretty Shetland shawls from the softest of wool.

Few of the crofters can afford to keep their grown-up children at home. Many of the young men seek more profitable employment in the factories of the midland valley. When the girls are grown they become servants for families farther south. Some of the girls are "herring girls" during the fishing season. When the fishermen are bringing in large catches of herring much labor is needed on the shore. So the girls go to the coast, going from city to city as the schools of fish travel southward. Many go to Wick on the east coast. They clean the herring, sort them according to size, and pack them in barrels. When the fishing season is over, they return home with their hard-earned savings. Many a crofter is helped by these girls and by the boys who send money home from their factory wages. Some of these young Scotch people, too, seek work and wages in America, and often help their parents by sending money back home.

So now you have seen the three parts of Scotland. Do you not think that the hardy thistle is typical of much of the rugged land of Scotland? It is typical, too, of the hard life that the people of those rugged portions must live. But, although their path is often thorny, perhaps you can see why they love their country and are often homesick for it when they go to other lands.

WALES

Most of Wales is a mountain region so rough that it is often known as "Wild Wales." But there are a few lowland areas. The lowlands of central England extend along the rivers into the Welsh highlands. Lowlands also border the northern and southern shores. Let us first learn about "Wild Wales."

Much of the highland region of Wales is wild and barren. In the northern and more rugged part of the highlands lies Mount Snowdon, the highest peak in Wales. Many tourists take the mountain railway to the top of Mount Snowdon to get a view over the wildest part of all Wales. Enthusiastic climbers have scaled its heights for the same view. If the day is clear, the traveler can see for miles. Around him, but below him, are rocky peaks. Moorlands sparsely covered with heather stretch for many miles; rapid rivers tumble over the rocks in noisy waterfalls; lakes and mountain pools nestle in quiet places and reflect the bright sunlight; wild canyons seem almost hidden in the shadows of mountain peaks; and narrow mountain passes lead to lowlands far away. One sees few homes in this wild region, only the occasional rude hut of some herder or a small settlement of quarriers of slate. Far to the northwest one can see the low green Isle of Anglesey. Farther westward, across the Irish Sea, the observer may barely see the shores of Ireland.

Many travelers who go to the top of Mount Snowdon are not rewarded with a wonderful view. They arrive at the peak only to be surrounded by pouring rain, for the rainfall there is more than two hundred inches each year. On some days a heavy fog lies in all the valleys and only barren mountain peaks show above the sea of clouds. On other days, although the weather may be clear in the valleys below, the mountain peaks are shrouded in mists.

The highlands of Wales have few resources. Their most important industry is the quarrying of slate. Although there are many slate quarries in other parts of the country, half of the slate used in the British Isles is quarried in

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FIG. 121. Wales. Some parts of Wales are very rugged, as shown in this picture. What material is used in building fences, barn, and house? Why?

northwestern Wales, in the region north of Mount Snowdon.

While the higher peaks are constantly swept by the winds and often shrouded in mist, the lower hills furnish grazing land for many small flocks of sheep. The short

grass, which would not support cattle, is well suited to sheep, and sheep raising is the main work of most Welsh farmers. As you travel about you notice that there are more sheep on the eastern than on the western side of the hills. Where the western slopes are well drained they, too, furnish good grazing land. In the winter time, most of the sheep are kept in the valleys near the farms, but in the summer many are driven to the higher, rougher regions. In the central counties of Wales there are more sheep than in any equal area in England, and because of its excellent quality Welsh mutton is famous throughout the British Isles.

The highlands are the least productive part of Wales. But in the early days they were very valuable as a place of refuge. When the Norsemen conquered the lowlands of Great Britain, the Celts were driven into the highlands of Scotland, into the rough land of Wales, and over into Ireland. The Celts repelled the invaders from the rugged hills of Wales and kept that land as their own. Each group of invading people was able to take possession of the lowlands, but in each instance they found the people in the highlands more difficult to conquer. So for many centuries the Celtic people lived in the highlands while the foreign invaders occupied the more fertile lowlands. The foreigners of the lowlands had rich lands and so had good crops and large flocks of sheep while the Welsh people found it very difficult to make a bare living.

The tourist thinks of Wales as a land of castles. There are old castles which were built by the invaders who hoped to conquer all of Wales, and there are castles built by the Welsh to protect themselves from their enemies. Even some of the old churches were fortified. As one looks upon the ruins of these old churches and the old stone castles, one thinks of the twelve hundred years of stormy history of little Wales.

SHETLAND ISLANDS
ORKNEY ISLANDS
Wick
Moray Firth
Inverness
Glen Mor
Don R.
Aberdeen
Stonehaven
SCOTLAND
Highlands
Dee R.
OUTER HEBRIDES
ATLANTIC OCEAN
NORTH SEA
Dundee
Loch Lomond
Dunfermline
Leith
Firth of Forth
Dunbar
Edinburgh
Tweed R.
Firth of Lorne
ISLAND OF STAFFA
Dumbarton
Greenock
Paisley
Clyde R.
Stirling
Glasgow
Ayr
Southern Uplands
Giants Causeway
North Channel
Firth of Clyde
Cheviot Hills
Tyne R.
Newcastle
Dogger Banks
Londonderry
Donegal
NORTHERN ULSTER
IRELAND
Belfast
Solway Firth
Pennine Hills
ISLE OF MAN
IRISH SEA
Preston
Blackburn
Leeds
Hull
Bradford
Oldham
Great Grimsby
Sheffield
Manchester
Liverpool
Mersey R.
Chester
Holyhead
HOLY I.
ANGLESEY
Llandudno
Mt. Snowdon
Stoke upon-Trent
Trent R.
Nottingham
Leicester
ENGLAND
Birmingham
CONNAUGHT
Shannon R.
IRISH
Liffey R.
IRELAND
FREE STATE
Dublin
LEINSTER
Barrow R.
Limerick
Tipperary
MUNSTER
Killarney
Waterford
Cork
Lee R.
Queenstown
Carnsore Pt.
St. George's Channel
Fishguard
Cambrian Mts.
WALES
Severn
Harwich
Swansea
Llanelly
Merthyr Tydfil
Llantrisant
Bristol
London
Thames R.
Greenwich
Canterbury
Dover
Bristol Channel
Cardiff
Barry Dock
Southampton
Brighton
Portsmouth
Str. of Dover
ISLE OF WIGHT
CORNWALL
Plymouth
Lands End
ENGLISH CHANNEL
Scale of Miles
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GENERAL DRAFTING CO. INC., N.Y.
10° 8° 6° 4° 2° 0° 2°
60° 58° 56° 54° 52° 50°

Because the early Welsh people lived by themselves in the highland areas they kept their own language. The Welsh language is still spoken, except in the lowland areas where many English have settled. In some localities one hears only Welsh, while in other localities both languages are freely spoken. Both are taught in the schools.

Let us leave the rough highlands and visit the rolling lowlands of Wales. What excellent roads one finds! Narrow country roads wind up and down the steep hills and then among the straggling towns of the lowlands. They pass between the long lines of stone houses with "slate roof, limed walls, and doors along the street." In olden times, when only a horse and cart were used, these picturesque roads were wide enough. Now that the automobile is replacing the two-wheeled cart, these excellent roads of tarred rock are being widened and straightened. The old Roman roads were mainly on the tops of hills, but the newer roads are along the bottoms of the valleys.

In the lowlands, well-trimmed hedges form a pattern like the fancy stitches on a crazy quilt. One could hardly picture the lowlands of Wales without thinking of hedges. In the spring they are white with the flowers of the hawthorn and form feathery borders along the roads and between the green fields. In the fall and winter the hedges are gay with the bright color of berries and changing leaves. There is a vine which drapes itself along the hedges. It can hardly be seen in summer, when its leaves blend with those of the shrub. In the fall, however, when the foliage has fallen, this vine forms gay festoons of yellow and orange-colored berries. It seems as if Nature's fairy hands had hung them there in celebration of the harvest season.

The Welsh people are proud of the beauty and the charm of Wales. They love its barren and bleak mountain tops, its stone fences, and its swift streams; they love its rolling green hills with their bracken and heather; they love its

hedges, white with blossoms in the summer, red with hawthorn berries and holly in the winter; they love the picturesque old castles, which tell the stories of the ancient strife and triumphs of their gallant little country. The Welshman loves his Wales and he wants the stranger within its borders to love it too. And most strangers find the land as charming as it seems to the Welshman.

One sees many quaint farmhouses in the lower lands. These farmhouses, that have stood for hundreds of years, have a peculiar charm. They snuggle close against the ground, with their thatched roofs trimmed neatly over the windows. The white or pink-washed walls are thick and the small windows are deep-set. Each smoking chimney promises a cheery fireplace within. One is certain of a cordial welcome from the kindly-eyed old man or woman who appears at the door. And one is sure to hear, "Won't you stay for tea?"

Many of the Welsh do not own their own land, but rent from owners of large estates. Let us visit one of these interesting old farmhouses which has been rented by the family of the present tenants for over two hundred years. It is a low plastered house and has white-washed walls and a quaint low entry with slanting roof. Pink roses frame the doorway. The large kitchen has a low ceiling, heavily beamed, and ordinary callers are ushered into this room. Pots of gay geraniums stand in the window. On one side of the room there is an old-fashioned Welsh dresser, which we call a sideboard. It has drawers below, and above are shelves used for standing plates and for hanging cups. There is an old family chest and an equally old mahogany drop-leaf table.

There is another room, a kind of parlor, which is not often used. The housewife builds a fire there once or twice a week to keep the room aired. Wales is a very rainy country. What would happen if the housewife did

not build these fires? The old walnut corner cupboard in this quaint room is of special interest. It contains interesting and treasured bits of old china. The Welsh have a fondness for old things and treasure those that belonged to their ancestors. Frequently, when the story of a certain heirloom is being told, one gets the story also of what has become of the mate to this particular vase or what has become of the other five of the half dozen cups. Many times there is a story of a mother dividing a precious tea set among her daughters. There may be a confession of how each daughter clings to her share, in memory of the mother that is gone.

The housewife takes us into the milk room where the pans of milk are arranged in rows on the shelf. Here, too, are the four quarters of a freshly killed pig, all covered with salt. There is a dressed hare that has just been killed. And what is in that alcove? That is where the cheese press is kept. The round disks of Welsh cheese are made in this room. They are about eight inches in diameter and four inches thick. There are about a dozen cheeses standing on the shelves and these must be turned every day until they are dry enough to keep through the winter. No one can imagine a Welsh home without its cheese.

There is another room, a scullery. It has a special oven made in a space in the thick wall. This oven is used for baking bread. Sticks of wood are put into the oven and burned for several hours. Then all the ashes are raked out, the pans of bread are put in, and the door is bolted shut. When the bread is taken out it is a beautiful golden brown.

After you have seen the house you will be invited to have tea. The Welsh are very fond of having tea. As they are very hospitable, they enjoy sharing their pleasures with their friends. The tea things are on the

table and the kettle is singing merrily on the hob. You notice some of the smaller things about the kitchen that you had not noticed before. There is a bright, shining brass bed-warmer hanging on the wall. Brass candlesticks are standing on the mantel. The fire irons, poker, tongs, and fender shine from their recent polishing. Tea time is a delight to both old and young. No one stops at one cup of tea. Slices of bread and butter, cut almost as thin as paper, are served, and also simple pastries, bakestone cakes, jam and apple tarts. Fruit cakes and tiny mince pies are the favorites at Christmas time. Do you not think that these Welsh homes are very comfortable places in which to live?

Most of the Welsh towns are located in the lower land. They are much like those of England. Rows of stone houses border the streets that wind through the narrow valleys. There are rows and rows of houses all alike. All the houses have the same number of front windows and doors and the same number of back windows and doors. There is the same kind of entryway from the street. Each doorway has the same kind of step, of brass, very clean and shiny. In the coal mining towns these houses seem to be built by the thousands. This is a very economical method, for it saves building material and planning, but it is not a beautiful way. However, this method of housebuilding is changing. Since the beginning of the new government housing scheme, two houses are built together and each two have a plot of ground. The newer houses have slate roofs, but the older ones are thatched. Some of the houses have a very small piece of lawn, enclosed by stone walls, and these make a most charming Welsh picture.

In returning from these interesting farmhouses and villages, one loiters along the way and enjoys the pretty landscape. Because of the frequent rains, the hills and

fields are always green. The growth on the smooth hills is much like that on the level fields. One time a little Welsh boy was asked, "What is a hill?" He replied, "A hill is a field with its back up." A good description this is, too. Hundreds of sheep are seen grazing on the

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FIG. 122. Wales. This picture shows the narrow roads typical of Wales. Some of the roads are being widened. The walls are taken down and put up again, so as to make a wider street. Soil is put on top of the walls. Sometimes hedges are planted in the soil. In Wales the people build everything in a very permanent form as they do not plan to change for several generations.

rolling hills, but one sees few cattle except in the lowlands along the northern and southern shores. Unlike Ireland, of which you will read later, Wales is not a cattle country. The meadows are both fewer and poorer than in Ireland and do not produce enough grass to support cattle. In the lowlands one also sees fields of grain, especially oats, as they thrive in the frequent rains. Only a little wheat

and barley are grown and so Wales cannot be called a "bread land." Only about one-sixth of Wales is cultivated, and so this little country cannot produce all of its own foodstuffs.

As in England, manufacturing and commerce are much more important than agriculture. Both are centered in the southern lowlands. All of the larger cities of Wales are located there, and the majority of the people live in that region. The reason for these facts is found in the great coal beds which are located there. The short swift rivers which flow from the highlands have cut through the beds of coal and exposed it in layers. The mining is easily done by sinking shafts and cutting tunnels into the sides of the valleys. In many places the coal can be brought out very near its own level. Towns have grown up near the mines. Houses, roads, railroads, and "coal tips" (refuse dumps) crowd the narrow valleys. There are strings of blackened cars on the tracks, great smoking chimneys, towering shafts, high iron framework, and noisy cables. Often a town is nothing more than one long winding street of stone houses all joined together and all alike. Here as in many other mining regions of the world the people really suffer. There is little room for gardens or for playgrounds for the children. During and since the World War some of the people have been given small gardens on the hillsides. Sometimes the houses are clustered against the steep hills in such narrow valleys that they receive little sun. And sometimes houses are built in abandoned mines and tunnels.

Some of this coal is steam coal and some is anthracite, or what is commonly known as hard coal. The steam coal is valuable for merchant and war vessels, for it burns with great heat but with little smoke. So it is in demand in many parts of the world. Consequently, much of the coal is carried down the valleys to the ports at the river

mouths and exported from Swansea, Barry Dock, and Cardiff. Coal is the most valuable export of Great Britain and Cardiff exports more than any other port in the British Isles.

Because fuel is mined near the shipping centers, many industries have grown up in this region. The iron-smelting industry was the first to develop. At first most of the iron ore was secured from mines on the northeastern edge of the coal field. Merthyr Tydfil was the first center of that industry. Now much of the iron ore is brought from northern Spain, where English money pays for mining the ore. As much of the iron ore is now imported, blast furnaces have been built at the ports of Cardiff and Swansea.

The tin-plating industry developed from the iron industry. What is tin-plate? Formerly the tin ore was mined across the Bristol Channel in Cornwall. A large industry in tin-plating continues at Swansea, although the tin is now brought from the Malay Peninsula. The Welsh tin-platers are so skillful that they are often brought to eastern United States to work in the tin mills. The copper industry is also an old industry in Swansea and both bronze and brass are made. You can find in your dictionaries what is used with copper to make bronze and brass.

The western part of the southern lowland is a rich farming region. There dairy herds are kept and grains and vegetables are raised. The products are easily marketed in the mining towns, industrial cities, and ports which lie to the east.

An important railway runs along this southern lowland. It is important, not only because it connects the Welsh cities with each other, but also because it extends from London to Fishguard, the packet station for Ireland. Instead of making a detour around the Severn estuary, the train goes through a four and one-half mile tunnel under the Severn River. Fishguard is only fifty-four

miles from Rosslare on the Irish coast. This is the shortest route between Wales and Ireland and many who go from Great Britain to Ireland are glad to have as short a water trip as possible.

The lowland along the northern coast of Wales is narrower than that of the south and has fewer people. Some coal, lead, and zinc are mined in the region and agriculture is also important. But this northern lowland region is best known for its seaside resorts. The mountains and the sea, both, attract the tourist. There are many seaside resorts but the best known is Llandudno. Llandudno is a good-sized seaside town located on a crescent-shaped bay. Fashionable hotels and boarding houses line the long sandy beach. On a sunshiny summer day the beach is thronged with merry-makers, the surf is dotted with the bathers, and the amusement pier is filled with the less active folk. Of what advantage is it that these resorts are near many great manufacturing cities of England?

The island of Anglesey with its rolling and grass-covered land is known for its dairy herds. There are more cows in Anglesey than in any other equal area in England or Wales.

The northern route from England to Ireland follows the beautiful coast line to the Menai Strait. A great bridge crosses to Anglesey and an embankment furnishes a bed for the railway from Anglesey to the smaller island, Holy Island. The packet station, Holyhead, is on that island and is only sixty miles from Dublin.

As you have seen in this chapter, the mountains of Wales have played an important part in the life of the people. Because they stand between the more densely populated lowland areas they tend to keep the Welsh people apart. Once each year, however, thousands of them get together in some town in northern or southern Wales for their great National Song Festival. At that festival they compete for prizes in instrumental music, in

solo singing, in choir singing, in the writing of poetry and essays, in history and stories of the Welsh people, and in various arts and crafts. A handsomely carved chair is given to the writer of the best poem. The "bard," as they call the poet, is "chaired" with great ceremony. A great sword is bared and sheathed three times above his head, amid the loud applause of his friends and admirers. Some of those who excel in music and poetry come from the coal-mining districts and many have had little training.

At these festivals some of the women dress in the national costume of Wales. The bodice, the full skirt, the small shawl of Welsh flannel, and the high and shiny beaver hat add a note of interest and color to the assembly.

The most impressive part of all the National Song Festival comes when the entire assembly of thousands of people sing together. As the victorious bard is "chaired" all join in the singing of the Welsh national song, "Land of My Fathers." For miles and miles around, the hills and mountains re-echo the glad chorus of the patriotic and music-loving Welsh. And as these people from the northern lowlands, the southern lowlands, and from "Wild Wales," all sing together, they sing and feel as one nation.

Irish Free State joined connection with the Empire Dec 11, 1936.

IRELAND

Some of the ocean liners that run between the United States and Liverpool stop at southern Ireland. Would you like to land at Cobh (Queenstown)? Large boats cannot reach the docks, for while the harbor is very large it is not deep. So you will find that the boat will anchor in the outer part of the harbor. Then a tender will tie alongside your boat and take the passengers and their baggage to the port of Queenstown. There you can take a train for Cork, ten miles distant. The train will seem strange to you, for each coach, like most of those in Europe, is divided into com-

partments. There are first, second, and third class compartments and the price of your ticket to Cork will depend on the "class" in which you travel. You would not find the first class as luxurious as railway compartments in the United States, but in many parts of Ireland you would find even the third class comfortable.

Arriving at the railway station at Cork, you must decide how to reach your hotel. Would you like to ride in a jaunting car? If so you will find the driver, or jarvey as he is called, a very good-natured man. You might take a street car, and, if you wish, climb to the top of the "double-decker" and get a good view of the streets. Or you might take an automobile from the station to your hotel.

You will find the jaunting car the most novel and it might be well to learn how to ride comfortably in one. The passengers sit on the two sides with their backs toward each other. At first you will hold on very hard, for it seems as if you were going to fall off at every turn, at every stop, and at every bump. But you will soon learn that riding in a jaunting car is not really dangerous. Wherever you go in Ireland you will see the jaunting car. Many of the more prosperous country folk drive to the near-by village in them; the village folk use them for business and for pleasure; the city housewives in the prosperous homes drive to market in them; many families go to church in them; and even in cities as large as Dublin and Belfast they are in very common use. Little by little, they are being replaced by the automobile, but it will be very many years probably before Ireland's quaint jaunting car will have disappeared.

Cork, although not a large city, is the third largest city in Ireland. Through its port many American products reach Ireland. As it is situated in the midst of a fertile region, it is also the port through which many farm products are shipped to England. Thousands of dozens of eggs,

large quantities of butter, cheese, poultry, live stock, hides, and some meat products are shipped from Cork to help feed the large population of England.

Would you like to go to the hill overlooking the city and look down upon Cork and its environs? Beyond the city you see tiny farms separated from each other by neat hedges. There are broad spreading trees along the roads. The city itself appears a dull drab, for you look down upon the slate roofs. But there are many red brick chimneys which make spots of color, and the smoke coming from some of the chimney pots gives an air of cheer. Many of the houses are attached in rows as in parts of Great Britain. But most of the middle-class homes have lawns and flower gardens and are separated from the street by fences of stone, brick, or iron. You look at the gates standing open and wonder if they are ever locked. Around many of the largest homes there are fences so high that you cannot see over them from the street unless you happen to be riding on the top of a double-deck street car. All the lawns are green, for Ireland is a land of heavy rainfall. Even the vacant lots are covered with grass which is thickly dotted with wild flowers in the summer time.

Cork is the most Irish of all the Irish cities. While many English have gone to Dublin and many English and Scotch to Belfast, few have settled in Cork. They have a saying that to be really and truly Irish one must be born within sound of the Shandon Bells which hang in the old church of St. Anne.

Let us leave Cork and travel by motor through southwestern Ireland. In the outskirts of the town we pass a small factory where woolen goods are made. Farther on we see several small flocks of sheep, but Ireland is a cattle rather than a sheep country. The heavy rains make grass plentiful and that is why Ireland has long been called

"The Emerald Isle." But much of the land is too wet for sheep to thrive. There is about one head of cattle for each person in Ireland but there are only half as many sheep. The drive takes you past much meadow land, for

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FIG. 123. Ireland. Blarney Castle. This castle is one of the many old castles scattered throughout the British Isles. Persons who kiss a particular stone in this building are supposed to become very eloquent talkers. So when a person speaks in a flattering way he is jokingly said to have kissed the "Blarney Stone."

sixty-four per cent of Ireland is in pasture and hay. In the summer time you see the farmer cutting his hay and spreading it out to dry. But all too often rain falls before the hay dries and many times it is injured or completely spoiled. An Irish farmer has seen his hay spoiled many, many times.

The country road takes you past many stone fences almost hidden by a luxuriant, green growth. Mosses and tiny flowers grow in the crevices of the rocks. Ivy vines, laurel bushes, whitethorn, blackberry bushes, and ferns give an air of freshness to the old fences which they partly conceal. There are many flowers, too, especially in those summers which have the most rain. The tall spikes of pink and red foxglove raise their "fairy fingers" or their "ladies' thimbles," as the blossoms are called; patches of fresh yellow iris dot the meadows; dandelions, too, add their bit of gold; and orchid-colored hyacinths and yellow lupine are abundant. But the most striking of all the flowers in late June are the bright red fuchsias which grow to a height of six feet and hide the stone walls behind their luxuriant bushes. The pink roses are more modest but are seen throughout Ireland. Ireland is a land of flowers, for each meadow seems almost covered; in fact, it is often difficult to step without crushing them.

You come to a village, very much like other Irish villages, and drive through its one principal street. It is Sunday and you notice many people turning into a side street to go to church. You notice some women in black capes and hoods. You are told that these are "country ladies" and that they are wearing the hooded cloaks which once were very common in this region. In summer time the hood is drawn over the face for shade and in the winter to keep out the cold wind. Across the street from the church are the humble homes of some of the villagers. Some of the houses are red, some buff, some rose, some gray, and some white, but each house is a different color from the adjoining ones.

Motoring westward, you leave the fertile fields behind and are in the midst of the rocky and rugged regions of southwestern Ireland. Here the roads lead along rocky hillsides. A few sheep graze on the spare grass of the

Courtesy Myrtes E. Clark

FIG. 124. Ireland. Scene in a farming region of southwestern Ireland. Stone walls and hedges so divide the land into irregular tracts that the landscape looks like a large crazy-quilt. This land can be made to produce crops and so is too valuable to be occupied by homes in this part of the country where fertile land is scarce.

steep and well-drained slopes. Sometimes you are near enough to see that each sheep is branded, so that each man can separate his sheep from the others. Some have a green stripe of coloring down one side; some have a spot of red; others have other colors and other designs. The sheep were branded when very young and the coloring has spread and faded as the wool has grown.

Here and there you see a peasant's hut. These look like a part of the rocky hillside. They are very small and made of stone from the hills. Many are roofed with thatch but the more prosperous peasant points with pride to his new roof of slate. Beside the peasant's hut is a pig or two and also a patch of potatoes, for potatoes are the staple food of most of the people of Ireland.

As you drive mile after mile in southwestern Ireland you are often near the water's edge. In places the road skirts one of the bays; in other places it crosses a peninsula. There are many bays along the coast of western Ireland but unfortunately they face in the wrong direction to be of much value as harbors for trading vessels. Most of the trade of Ireland is carried on with Great Britain, and products are shipped there from Cork and the eastern ports.

Would you like to stop at one of the peat bogs and watch the men cutting peat? One man has a "turf spade" with two sharp blades at right angles to each other. He cuts out a brick, or what they call a "sod of turf," and throws it down. A second man picks it up and passes it on to a third who stacks it to dry. As these "sods of turf" dry they become about one-half their former size. Sometimes you see a larger number of men working together. All are helping one man, for each peasant generally owns his own bog. Possibly the next day they will all cut for another man, and so on until each man has cut enough peat for winter fuel. Sometimes a peasant cuts his peat

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FIG. 125. Ireland. A typical village scene. Not all of the thatched roofs in Ireland are so carefully trimmed as these. Some of the more prosperous peasants are replacing thatched roofs with slate. What does this scene tell about Ireland?

alone. Each peasant is said to be his own miner and now you can understand why.

When the summer is very rainy the peat does not dry, and then the peasants suffer severely for want of fuel during the winter. Although Ireland is said to have a mild

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FIG. 126. Ireland. Peat is the fuel most used by the people. It is cut and dried during the summer as it is always too rainy for drying peat at other seasons. Even in summer it is sometimes so rainy that it is difficult to prepare the winter supply.

climate, the winters are rainy and raw, and all who cannot keep their fires going suffer very much.

Peat is used not only as fuel but also as bedding for cattle and as fertilizer for the soil. About one-seventh of Ireland is covered with peat bogs. The largest bog in Ireland is the Bog of Allen, which lies west of Dublin. It covers 400 square miles. In the early days it was a great hin-

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FIG. 127. Ireland. A hayfield in the beautiful Killarney region of southwestern Ireland. Why is hay an important crop in Ireland?

drance to travel. Now some of it has been drained and roads cross it. A canal runs through it to Dublin. Companies cut peat in the Bog of Allen, load it on canal barges, and take it to Dublin. You can see piles of peat along the canal in the city. All of the poor people buy it for fuel. The more prosperous buy it in small amounts for their

Courtesy Myrtes E. Clark

FIG. 128. Ireland. Thatched houses in Killarney. These are a beautiful example of thatching because of the ornamentation and the neat trimming.

fireplaces because of its odor, which is pleasant when not too strong.

There are many lakes in Ireland. Here, in this rugged southwest region, you may visit the most beautiful ones, the Lakes of Killarney. The low mountains meet the lakes; timber covers the slopes and arbutus and maidenhair fern grow in great abundance. Many islands dot the surface of the lakes. Some are tree-covered and on some you see ruins of old castles.

Northwestern Ireland is much like the southwestern part. It is even more rugged, and many of the people are poor. It is said that in that region "the poor take care of the paupers." Although the scenery is wild and beautiful, the hillsides are unproductive. Many of the people live like the crofters of western Scotland.

If you travel from Killarney to Dublin by rail, you can travel through the "Golden Vale." This rich lowland region extends from Limerick to Tipperary. There are two good reasons why it has been named the "Golden Vale." It is a rich farming region and its products can be sold for gold. It is also an important dairy region and its many pounds of butter are of a golden hue.

Dairying is a very important industry in Ireland. Before the coöperative dairies were established, the farmers' wives made and sold butter in the country towns. Some of the butter was very good; some was equally bad. Irish butter could not compete with Danish and Swedish butter which was of uniform quality. Now the coöperative dairies of Ireland turn out butter which can compete in modern markets. Each coöperative dairy society has its own creamery. In the morning, one sees a whole caravan of two-wheeled donkey carts arriving at the creamery. Each cart is loaded with cans of milk. Many are driven by old women with full skirts, tight waists, and shawls of somber hue. Some are driven by the farmers' daughters, gay in modern dress. Some are driven by men who are too old for other work. Inside the creameries one finds the most modern equipment. The cream is received and pasteurized, the butter is churned, and the dairymaids and dairymen in snow-white garments cut and pack the butter.

Some farmers belong to coöperative societies which sell hogs, cure bacon, market poultry products, and buy farm supplies. Although the coöperative societies have helped many of the Irish farmers they have not done nearly so

much for Ireland as they have for Denmark. However, they have been of value. Thirty-five years ago there were only a few who were interested in coöperation. Now there are more than one thousand societies which do an annual business of many millions of dollars. There is a coöperative store in almost every town.

With all the improvements made in the agriculture of Ireland in the last half-century, it is still capable of much greater improvement. Almost one quarter of the surface of the country is covered with peat bogs and rocky hillsides. Besides, Ireland, like Wales, has too moist a climate for wheat to do well and barley thrives only in the drier eastern section. Oats is the main grain crop. Some of the hay and pasture land could be cultivated and other parts could be drained and plowed. It will be necessary to do this before there will be enough land for the farmers now living in Ireland to make a good living in agriculture.

The greater part of Ireland is now independent of England. Your map will show you that the island is divided into two parts, the Irish Free State and Northern Ireland. The large southern division is the Irish Free State. Each division has its own parliament. The government of the Irish Free State is carried on at Dublin, while Belfast is the capital of Northern Ireland.

Dublin is one of the old cities of Ireland, and there much of Irish history has been made. It is situated on the eastern margin of the great central plain, and can be easily reached from other parts of Ireland. It is also the port nearest Great Britain at Holyhead.

Dublin is a mixture of old and new. Dublin Castle was for many years the home of the English governors sent over to rule Ireland. Its dungeons have held many famous Irish captives; its walls have heard many state secrets; its rooms have seen many men rise into power and later fall into great public disfavor.

Courtesy Matson & Ford

FIG. 129. Ireland. These men are waiting their turns to deliver milk at the country creamery. They are having a very pleasant time chatting while waiting. Notice the rocky hillsides.

St. Patrick's Cathedral and the Trinity College buildings are the most beautiful buildings in Dublin. Trinity College was one of the first colleges in the British Isles to give degrees to women. It stands in the heart of Dublin and is surrounded by lovely gardens and the pretty homes of the wardens and the masters. In the beautiful library of Trinity is one of the most treasured possessions of all Ireland. It is the Book of Kells, which is a copy of the gospels written in Gaelic and dating from the eighth century. It lies open on the table, carefully covered by glass. Each day the attendant turns over a new leaf and it happens that there are as many pages as there are days in the year. Hundreds of college students pass this relic each day, and many stop to examine the page, for each capital letter is a marvelous example of the illuminator's art. There is nothing so much coveted by a student in Ireland as to receive a fellowship in Trinity, and each appointment to such a fellowship is given much discussion in all the Irish newspapers.

Before the World War the most important social event of the year in Dublin was the horse show, with which was combined a flower show. Ireland has always been famous for its hunting horses. In the days of Queen Elizabeth, hunting horses and hawks were the gifts most frequently sent across the Irish Sea to pave the way to favor at the English court. Horse buyers from all Europe gathered at Dublin. At each horse show several horses were put through all their best paces before the gay and richly dressed spectators. Today the horse shows are not quite so gay.

Dublin has a few industries. By far the most important is the brewing industry, one of whose products is Irish "stout." Dublin boasts the largest brewery in the British Isles. The plant covers sixty acres of ground and is furnished with all the latest modern equipment. Most of the barley grown in the lowlands around Dublin is used in this

brewery. But one also sees there barley from California and other parts of the United States. This plant frequently has 1,000,000 bushels of grain in storage. The hops are imported from Oregon and from Kent, "The Garden of England." Kauri pine is brought from New Zealand to make the fermenting tuns, or casks. American oak is used for making the barrels in which the stout is shipped. Over 20 million dollars' worth of stout is exported annually. Some is sent to Northern Ireland but most of it is exported to Great Britain. The residue after the stout is made, called "brewery grains," is dried and fed to cattle during the winter.

A large factory in Dublin, called a biscuit factory, makes hundreds of kinds of crackers, cookies, and small cakes. These are packed in tin boxes. Many are used in Ireland, but others are exported to different parts of the British Empire. For many years, Dublin has also manufactured poplin, a cloth made of wool and silk. Today there are also small factories which make lace and embroidery, which were formerly all made in the home.

Dublin is a center for the shipment of live stock to England. The cattle market is in the midst of the town and the market is held every Thursday. The large concrete floor of this market is subdivided into many sections by iron railings. Cattle and sheep are brought there in large numbers. When they are sold for export they are driven from the market place, or stockyards, to the docks three miles away. It is frequently necessary to stop the street cars in order to give the animals time to pass. Most of the cattle and sheep are shipped from Ireland to Great Britain "on the hoof." At present about $80,000,000 worth of live stock is shipped from the Irish Free State each year. Some goes to Northern Ireland but most of it goes to Great Britain. Only $20,000,000 worth of meat is exported and more than half of it is bacon. It would be

much better for Ireland if packing houses were erected there. At present, the animals lose weight on the journey and some die. If packing plants were established in Ireland they would furnish employment for many of the people. Then, too, the by-products could be used there and profit made from them.

Courtesy Myrtes E. Clark

FIG. 130. Ireland. Driving cattle to the railway for shipment to Dublin. On the same morning other small, and some larger, herds were driven to the same railways for shipment. Why is Ireland a cattle-raising country?

Near Dublin is the famous Tara Hill. Today it is nothing but a bright green field on which stands the monument of St. Patrick. Once it was the site of the most celebrated of all the royal palaces of Ireland. There, for centuries, early Irish kings lived and ruled. Now only moated mounds mark where these palaces once stood, and cattle grazing peacefully over the hill give no hint of its ancient splendors. A supposed Harp of Tara is a second treasure of the Irish, and like the Book of Kells is preserved in Trinity College.

A few miles from Dublin one can see one of the old Round Towers which are so often seen in Ireland. It is not known by whom or when they were built but it is thought that they were places of safety. They were built of heavy

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FIG. 131. Ireland. A village belle and her mother. The bench on which the mother is sitting extends under the chimney. This "seat" is called the "inglenook." Why does the mother sit there? What has the girl in her hand? Of what is the floor made?

masonry and the door is generally some distance above the ground. These towers stand like sentinels in all parts of Ireland but do not tell their past to us. A new Round Tower has been built in a cemetery in Dublin. It is a monument to the great Irish orator, Daniel O'Connell, as the old towers are a monument to Ireland's past.

Large mounds are found here and there in the country-

side. Historians believe that these are the remains of old Celtic forts and remnants of the Celtic life which lasted for more than one thousand years. To the peasant, however, they are certain proof of the existence of the fairy folk who dwelt in Ireland long before the Celtic time. Nothing is more characteristic of the Irish peasant even today than the belief in these mysterious fairy folk. Not a stick or a stone on these mounds will be touched by the older people of the village, for they are sure some harm would come to them if they did.

Now we will leave Dublin and journey northward toward Belfast. Our trip takes us through the eastern part of the lowland belt which extends through Ireland from east to west. This is one of the most prosperous farming sections in Ireland. It has fertile soil, and as it is located on the east side of the island it does not receive the heavy rainfall of the west and of the highlands. Finally your train comes to the border line between the Irish Free State and Northern Ireland. There an inspector comes through the coaches to examine your baggage for goods on which duty should be paid.

You have seen that the Irish Free State is devoted mostly to agriculture. Northern Ireland is the main center of Irish industries. As you approach Belfast you see fields where flax has been grown. There are ill-smelling pools where the flax is being retted as in the River Lys in Belgium. In some of the villages through which you pass there are scutching mills, where the soft flax fiber is separated from the woody material. And you see great fields covered with thousands of yards of linen which is being bleached. Some of the fields are covered with tan-colored linen just from the mills of Belfast; some are covered with pretty yellow linen only partly bleached; some with white linen thoroughly bleached. Most of these bleaching fields belong to the great weaving mills located in Belfast.

Belfast has very many linen mills, and smaller cities near are also centers of the linen industry. As you go through the business section of Belfast you are certain that linen is king there. At one time all the flax used at Belfast was raised in the neighborhood. Now the greater part is imported. Standing on a corner near the docks you see heavy trucks drawn by large, beautiful horses. They tug at heavy loads and pull them over the cobblestone streets. Many of the trucks are loaded with bales of skeins of yellow flax. Some of the loads are headed toward one mill and some toward another, for all must import a large part of their supply. You also see great boxes of linen goods being hauled to the docks for export to all parts of the world.

Possibly you will be able to go through a spinning and weaving mill, but today it is very difficult to gain admittance. In the spinning mill the fiber is combed and carefully graded. Then it is made into threads. You do not envy the girls and women who work at spinning, for the rooms are kept very warm and very moist so that the fibers will not break. The threads are sent on bobbins to the weaving rooms, where they are made into different grades of linen. Some Irish linen is known as Irish damask.

Many of the girls who work in the linen industry are following in the footsteps of their mothers and grandmothers. The men find employment in another large industry, the shipbuilding industry. In this respect, Belfast reminds us of Glasgow. Belfast is the mother of the great liners called the "ic" boats, the Celtic, Olympic, Teutonic, etc. Across at Glasgow, the competing yards construct the "ia" boats, the Lusitania, Aquitania, etc.

The industry and trade of Belfast resemble that of England and the lowlands of Scotland. Much of the business of Northern Ireland is in the hands of people of English and Scotch ancestry.

Belfast is a modern city, but since the World War its business has not been so active as before that time. Fewer countries can afford to buy its products.

From Belfast, we will take a train to the northern coast to see the Giant's Causeway. Ages ago, one layer of lava after another was poured out in this region. Some of the layers were very thin; others were thick. As this lava cooled it cracked into irregular columns and the waves washing over it carried away loose portions of the layers. Great terraces of this lava now remain like irregular pavement or giant pieces of honeycomb. Many of the columns have broken off at different heights, leaving fantastic shapes. The ready Irish imagination has named them Chimney Tops, Giant's Organ, Giant's Loom, and Giant's Grandmother.

We will now take a train westward to Londonderry, the most important port on the north coast. In olden days this city was called Derry, but several centuries ago the kings of England gave many large tracts of land in that region to Londoners and then it became known as Londonderry. But the old Irish folk still fondly speak of it as Derry.

The old wall still surrounds the old town. But many of the modern industries of Londonderry are situated outside the wall. Londonderry is a center of the linen industry and there are shipyards, tanneries, breweries, and flour mills. It is also a center for salmon fishing. But it is mainly important as a port. It is situated in a small but rich farming section and exports bacon and other agricultural products. Boats ply from Londonderry to Glasgow and Liverpool. There is also a considerable coasting trade between that port and Belfast and other Irish ports. Some boats sailing between the United States and Glasgow call at Londonderry. So if you wish you may take a boat at Londonderry and return to the United States.

As you leave the shores of the Emerald Isle you will find that you forget the wet weather, the barren highlands, and remember only the beautiful lakes, the romantic castles, the hedge-bordered country roads, the wealth of wild flowers, and the kindly hospitality and good cheer of the people.

war declared Sept 2, 1939
Russia & Germany against the allies
Great Britain & France Sept.
England)
Poland defeated by (Russia) Germany. 1939

Chapter IX

NORTHERN SLAV COUNTRIES

RUSSIA

The map of Europe shows that in Europe there are a number of different countries or nations. Each nation is separated from the others by a difference in language, traditions, history, culture, and trade interests. Only in the eastern part of Europe do you find a large area belonging to one nation. This nation is Russia.

Formerly, Russia was even larger than it is today. Finland, Esthonia, Latvia, Lithuania, and a part of Poland as it is today, belonged to Russia until quite recently. Ukraine is independent of, although allied with, Russia. The fruitful fields of Bessarabia which lie between the Dniester and Prut rivers are now a part of Rumania but were formerly a part of Russia. Small areas in the southeastern part are struggling to form republics.

In spite of all these losses, Russia is several times as large as any other country of Europe. Although the northern coast of Russia is washed by the polar sea its southern peninsula, the Crimea, is fragrant with the odor of orange blossoms. From Poland to the Ural Mountains, the vast plain of Russia seems almost immeasurable. A person traveling through Russia for a night finds the scene about him in the morning almost exactly like the one he left the evening before.

There are plains everywhere, farther than the eye can reach. Dotting the plains are gleaming birches and dark pine trees. There are a few straggling villages with low

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FIG. 152. Russia. These sheep are grazing in a valley in the Caucasus Mountains in Georgia. Mutton and wool are the main products of this region. Locate the Caucasus Mountains on a map. What effect do you think these mountains had on the migration of the people from Asia into Europe? Why?

gray huts and churches whose onion-like cupolas rise into the clear air. There are vast fields and stretches of grass along the broad streams. Along the banks of the rivers alder bushes grow, and sometimes one sees lively cities there. The whole country seems to be made on the same plan; there is always more plain, as unending as the flocks of crows which cast their dark shadows on the land.

In winter, the country appears even more uniform. Then a thick white blanket of snow is spread over the frozen rivers and lakes, fields, woods, cities, and villages. In the northern and central parts, ice covers all the waters and serves as a welcome bridge for sleighs and riders.

Only on the edges of Russia does one find mountains. In the southeast, the Caucasus Mountains tower wild and rugged; in the east, the richly wooded Urals remind one of the beauty of central Germany. All the rest is one great plain.

The barren tundra area of northern Norway, Sweden, and Finland stretches eastward into northern Russia and farther eastward into northern Siberia. In this region, the short summer produces few plants for animals, and for that reason there are few people. In spite of this, Archangel has developed into an important city in the midst of the tundra. This is because Archangel was for a long time the only port of Russia leading directly to the Atlantic. All of Russia's other ports led past waterways controlled by other nations. The Murman railroad has opened up the new port of Kola in the tundra area.

How different the view which greets the eye south of the tundra! Here the forest is king. Timber is abundant and the Russian builds his house mostly of tree trunks instead of boards. All railroads in this region use wood for fuel. The traveler finds the Russian forest often unbroken for days. In the north one sees the brighter color of the

tender birch leaves and the shining white of the birch bark among the dark green firs and pines. As one goes south, birches, oaks, and other deciduous trees take the place of evergreens. Which do you think would seem more beautiful to you, the tall groves of beeches and oaks

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FIG. 133. Russia. A peasant home in Ukraine, a rich black-earth region lying chiefly in the valley of the Middle Dnieper. Ukraine is the richest farming region in all Russia. Does this house resemble the houses in the Baltic States. Why?

near Poland or the dark firs north of the upper Volga? Many animals have their homes in the midst of these forests. The bear lumbers through the thick underbrush, visits the fields of the farmers, and often makes himself quite at home with the sweet contents of a beehive. The wolf slips across the plain in pursuit of the flock and in the winter lurks in the neighborhood of cities in order

to snatch a bite more easily. Fox, ermine, marten, fitch, sable, and lynx live in the midst of the woods. These animals, and many more, furnish the rich furs which are sent to markets all over the world. Why are the furs of Russia becoming more and more valuable?

In the midst of the wooded region one finds fertile fields and rich meadows. Toward the south the forest disappears, and one sees the "black earth" region which has produced large quantities of grain for many years. This area of rich farming land stretches in a broad belt from Kiev beyond Samara. Here one finds great fields of grain, hemp, flax, sugar beets, tobacco, and even grapes and other fruits. If the rain comes during the growing season this area produces wonderful crops, the second largest grain crop in the world. If the rain does not come when needed the crops cannot grow in the summer. Then famines occur.

Southeast of the black earth region are the grassy steppes. These steppes furnish rich grazing lands, except around the Caspian Sea, where the land is largely desert. You would like to take a boat and lose yourself along one of the many rivers which cross the steppes. There among the reed thickets the bear has his hiding place; flocks of wild ducks and geese remind you of the stories your grandfather may have told you of early days in the United States; herons, storks, and sea gulls fish for food or quietly preen their feathers in the sun; turtles, lizards, and snakes rustle through the reeds.

Along the shores of the Black Sea, some areas have a Mediterranean climate and there the olive and grapevine grow.

If you will look at your map you will find that many rivers of Russia rise in the low Valdai Hills and flow north or south. From these great rivers large quantities of fish are obtained for food. These rivers are also important as

highways for communication between the most distant parts of the country. Why would you not expect to find many rapids to interfere with navigation in the rivers of Russia? Queen of all the Russian rivers is the Volga, which the peasant calls "Mother Volga." The true Russian sees the spirit of all Russia in this river, and many are the stories told and songs sung about her wonderful past.

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FIG. 134. Russia. Many steamers like this one are seen on the Volga River. Notice that it is towing a barge. What can you tell about the Volga River and the country from this picture?

This great river passes through a fruitful agricultural region. Over its western tributaries the products of the industries in and around Moscow are brought to the Volga and over its eastern tributaries coal, platinum, and precious stones from the Ural Mountains are similarly assembled.

Great cities have sprung up along the banks of the Volga. One of these is the commercial city of Nijni Novgorod, the town of great fairs. Every summer for several weeks one sees many people there besides Russians. There are Swedes, Poles, Germans, Letts, Lithuanians, Rumanians,

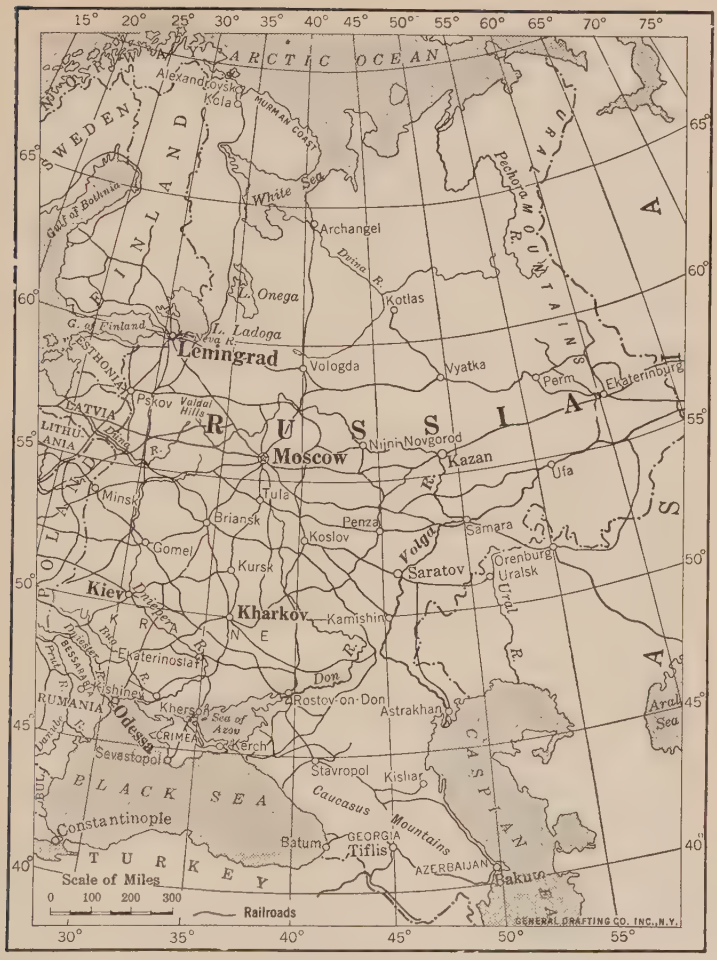
Bulgarians, Greeks, Armenians, Finns and still others. They are all buying or selling, and their great variety of costumes makes a most interesting picture. There East and West exchange products. As the railroads have developed, these famous fairs have lost some of their former importance.

Another one of these cities, a little below Nijni Novgorod, is the Tartar city of Kazan, which is even today the center of the Mohammedan religion in Russia. The many slender minarets of the mosques give evidence of this. Their shining crescents overtop the cross of the Russian church, to which most of the Russian Slavs belong.

Still farther down the Volga we find the attractive city of Samara. This city is in the midst of a rich grain area and immense grain elevators line the banks of the river. The manufacture of flour is the most important industry. The location of Samara on the most important river of Russia and also on the main line of the Moscow-Siberian railway makes it an important trade center.

Kazan, Samara, Nijni Novgorod, and Saratov are the large trading towns on the Volga River. Near the mouth of the river lies the port of Astrakhan. Although it is dirty and unattractive, it is a very busy city. Goods from the East are carried across the Caspian Sea to Astrakhan. From there they are sent up the Volga River or over the railroads for distribution throughout Russia and other parts of Europe. Russian goods are sent eastward in return. Great tankers bring petroleum from the rich oil fields of Baku to the mouth of the Volga, where it is transferred to river boats. At Astrakhan one also sees many fishermen bringing in their heavy catches of fish from both the Caspian Sea and the Volga River.

How would you like to take a trip which is even more thrilling than one by train or steamer? Then step into a Russian sleigh and glide over the endlessly wide plain of



the Russian steppes. The slightly rolling ground is covered with snow. Hardly a tree appears and neither path nor road is seen. Only milestones tell us we have not lost the way.

The lively team of three horses races along without seeming tired. The lead horse goes at a swift trot. His head is lifted high under an arched yoke, on which hang little bells. These bells are often so chosen that their tones blend harmoniously in the sharp wintry air. The two horses side by side, smaller than the leader, run along with tight traces, generally at an easy gallop. We are wrapped in thick furs. We feel the woolly warmth of the felt boots on our feet. The coachman crouches sideways on his box. A high lambskin cap covers his blond hair, and good-natured blue eyes peep out from under it. He wears a fur coat and a bright girdle is wound about his hips. His feet are in high, wide felt boots.

He urges the horses on with loud calls: "Eh, my little pigeon, forward!" "Run, then, my doggie!" "Keep going, you rascal!" "The devil take you!" And he swings the short-handled whip so that its sharp and merry crack cuts the air. But he takes care not to touch the horses with it. He prefers to talk to them, now addressing them in friendly fashion, now reproachfully warning them, now scolding them angrily. They know his voice and obey it.

The sleigh glides smoothly along. We reach a wood and then leave the dark trees behind. We fly past hayricks and then through the broad street of a village. Almost the only human beings we see are wrapped warmly, like ourselves, and riding in sleighs like ours.

The coachman becomes talkative. He tells of himself, his home, and his parents. The hours fly past. Finally evening comes and the wind becomes stronger. We can go no farther, for in the darkness it is easy to miss the guide-posts. If we lose our way, only a lucky chance could keep us from freezing to death. We must seek a shelter for the night. The low, wooden fences which surround a Russian village are seen ahead in the darkness. A kiln and a group of hayricks fly past and then the sleigh turns into the single

street of the village. To the right and left of the broad street, faint lights glow through the thickly frosted windows of the huts and plain wooden houses. Two of the latter are larger than the others. One is the house of the merchant and the other that of the mayor of the village.

The coachman stops before the mayor's house, for there are no inns. He jumps from his box and strikes on the gate with the handle of his whip. A servant in cotton trousers and bast shoes, with a cape carelessly thrown on, opens the gate and bids us welcome. He leads the horses into the barn, unharnesses them, puts hay before them, and pushes the sleigh under the protecting roof of a shed.

We enter the house. The master of the house comes toward us and speaks a kindly welcome, offering us his hand. He does not ask us whence we have come or where we are going. He leads us into the living room. He, too, is blond and blue-eyed, tall and broad of figure. The living room is a pleasant, bright room. The wooden walls are clean and the cracks are carefully stuffed with tow and moss. The ceiling is made of dark brown beams, and from them hangs an oil lamp. One of the walls is whitewashed and on it hangs an icon or the picture of a saint. Against this wall stands the clean pine table around which we are soon to gather.

In a corner of the room stands a broad, massive stove. Its warm tile top serves the family as a sleeping place. The grandfather is up there now, smoking his pipe contentedly. The servant generally sleeps on the wide bench built around the stove.

Soon the housewife sets the steaming samovar on the table and fills the glasses. She passes the sugar only to the master of the house and to the guests. The hot tea helps to warm our chilled bodies. Then the master of the house passes around the brandy (vodka) flask. Now, when all have drunk their tea and vodka, the host begins to ask

about the journey and we chat until it is time to go to rest. Then a fresh straw bed is shaken down for the guests. The family mount the stove, and soon their deep breathing announces that one can sleep there as well as in a bed.

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FIG. 135. Russia. A samovar mender at work. Do you think he will have work enough to keep him busy? Why? This picture was taken in Russian Turkestan, which is in Asia, but in most ways it is typical of European Russia as well.

Not every peasant house in Russian villages is so well furnished as the mayor's, for that boasts a cupboard, pictures, and plate rack. Most of the houses are much more poorly furnished, but the stove, table, bench, icon, and samovar are never lacking. Everywhere, even in the smallest hut, the same cordial hospitality reigns.

The Russian peasant is of happy disposition. He is fond of company, song, and dance, and likes to see guests about him. He never inquires about the number, but rejoices when his hut or house is full. There are always tea and sugar and a drop of vodka. Often in the long winter evenings he entertains his neighbors or else tramps through the snow to their homes. The men seat themselves at the table, drink tea and vodka, and smoke their pipes or cigarettes. At the same time they weave bast shoes or carve all sorts of wooden articles, which when brightly painted are sold in other countries. Here, too, they talk over the affairs of the town, methods of farming, taxes, the harvest, and the debts to the storekeeper. They finally say, "It is not a good condition. There is little money, much work, and many taxes, but God will provide and the bread will last this time the entire winter."

The women chat on the bench of the stove. Some spin, others weave, and still others make shirts for the household. Their merry voices rise through the heavy tobacco smoke which fills the room. One of the men plays his accordion. Soft, melancholy notes sound under his skillful hands and seem quite different from his laughing face. His songs tell of the heroes of olden times, of battles with the Tartars, of the Blessed Virgin, of Mother Volga, of fairies, and of merry sleighing parties in the moonlight. These plain, simple songs always touch the very heart, whether they are heard in winter in a smoky room or on a summer evening floating from a Volga log raft.

The Russian peasant likes festivals. Besides the many feast days of the church, there are festivals for the harvest-time, spring, betrothal, and marriage. At such feasts the women are gay in colored skirts and kerchiefs, embroidered waists, and a diadem-like headdress. Their feet, clad in bright-colored high leather boots, stamp on the floor in the merry dance. The young men are dressed in high

shiny boots, wide trousers, and gaily colored or embroidered shirts with a bright girdle around the waist. Even in summer they wear the becoming fur cap. And how the

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FIG. 136. Russia. Quaint dairy maids in the city of Kiev. Notice the details of their costumes.

happy crowd dances! These dances have many different and graceful movements.

As one drives through the Russian villages, one notices that there are few schools. Few of the peasants can read or write. Distances in Russia are great, and the winters are both long and cold, so children cannot go to neighboring

villages to school. In many villages only the priest and the storekeeper have any education. But even though there are very few village schools, the church is never lacking. It stands in the midst of thatched huts, wooden houses, and carelessly built sheds.

The one great desire of the Russian peasant has always been for more land. You would think that in such a very large country each peasant would have a large piece of land. But that has never been true. In the first place, the Russian population is very great. Then, too, large tracts of land have been owned by the state and by the former nobility. What land was left for the peasants was owned not by the individual peasants, but by the communities, called mirs. Every few years the land community redivided its land according to the number of workers in the community. Each worker received three tracts of tillable land and tracts of meadow and forest, while the pasture land was held in common. Each farmer used one of his tracts for wheat and one for barley, and the third lay fallow. It was necessary to let one tract lie idle each year as no provision was made to fertilize the soil. As the population of the community grew, each share became smaller and smaller. The poor peasant, all too often, could not raise enough grain for bread for his own family. When their small crops failed because of drought or other unfavorable weather conditions there was always famine. The small size of the peasant farms, the lack of enough rain, and the disorganization following the Russian Civil War brought on the terrible famine of 1921 in the Volga district, in the greatest grain-producing country of all Europe. Reforms in the ownership of land are being attempted, but only time will tell of their success. The peasants must also be taught modern methods of farming, for many of them are quite contented to farm after the fashion of their forefathers.

In spite of his poverty, the peasant is far from stupid.

The system of government has kept him in a sort of half-awake condition. The old government was satisfied if the peasant paid his taxes and at twenty years of age served as a soldier. He needed no special education to do that,

Courtesy International Committee of Y. M. C. A.

FIG. 137. Russia. Peasant women sorting potatoes. Women as well as men do heavy work in Russia.

and so three-fourths of the population were left in ignorance. The life of the peasant is not joyless. The family lives together in peace, obeying the oldest man of the house. He decides what work is to be done and in times of need sends some of the members to find work in the city. The women often have the hardest time, for they generally do the greater part of the work at home.

The foregoing picture shows the Russian peasant as a good-natured, sociable, hospitable, and life-loving son of his land. Its gigantic woods, waving fields of grain, mighty streams, and broad snowy plains are so full of charm that not even the stranger can forget them. How much less the Russian peasant!

It makes little difference whether the traveler in Russia visits a town of ten thousand people or two hundred thousand; all the towns seem to be built after exactly the same pattern. If one were to take a smaller town and add a few more streets, put down a few more street car tracks, and build at least one more picture show, one would make from the smaller town a larger town like Samara or Perm.

In France, Italy, Germany, and many of the other countries of western Europe one finds quaint old towns with narrow, crooked lanes winding up the slopes and crisscrossing each other at all possible angles. But in Russia there is plenty of space. The usually straight streets are wide and cross each other at right angles. At many of the intersections there is a church or monument. In the main square is the chief church of the town, with the cross towering above its green dome The bell tower stands at one side. The swinging hammer touches the outside of the bell and calls every one to worship.

Each of these Russian towns has a main street, which in former days was frequently named after one of the czars, as Petrowskij, Alexandroskij, or Nikolajewskij. Now all these names have disappeared and in their places appear Councillor, Freedom, or Revolution Prospect. One does not find the main street beautiful. Too often it is lined with barrack-like stone or tile buildings, for even the public buildings, such as schools, law courts, city offices, and hospitals, are built without any thought of beauty.

When one leaves the main street one is in the midst of a charming Russian scene. Then one sees the wooden

houses. Each one is separated from the others by neat courtyards, gardens, and even farm buildings. The houses are seldom more than one story high. The brown beamed walls are topped by red or green tin roofs. Rows of flower-pots are seen through the small clean windows, and the wooden verandas are neatly carved. The gardens which separate the houses from the street are the chief charm in summer. In June the gardens are colored with nodding sprays of lilac; a little later they glow with the yellow wheels of the ever-present sunflower.

Few, if any, of the streets are paved, but a plank walk, elevated a foot or more above the ground, runs in front of the houses. In the winter, when the great masses of snow have driven every vehicle except the sleigh from the streets, the people follow this high walk. In the rainy weather of summer it is valuable, too, for then the streets are so muddy that people as well as wagons are hopelessly mired.

One finds a bazaar in every Russian town. The wooden stalls form narrow streets in which a dense crowd throngs throughout the entire day. Each merchant praises his wares in a loud tone of voice. Everywhere buyer and seller are arguing about the price that shall be paid, for like the Oriental traders, few Russian traders have fixed prices. All the things for keeping house and working the farms are spread out in the different stalls. There is Russian bread, meal, and fish of all kinds. And there are luxuries like tobacco, cakes, sunflower seeds, and many kinds of beverages. But there are dry goods too, and one passes beds, stoves, tools, and machinery; in fact the bazaar is like a great department store in which everything, old and new, is sold, sometimes at a very low price.

If the traveler does not wish to jostle his way through the crowd at the bazaar, he can find everything he wishes in the well-furnished trading houses. These are sometimes so large that they occupy whole blocks. There the supplies

are so varied and so well arranged that one can almost imagine oneself in a large city. It is not necessary to visit either the bazaar or the trading house to buy food and drink. The Russian peddlers are as common a sight on the streets as the Russian coachmen. They walk along the streets with trays in front of their chests. On these different trays are many things to tempt the Russian buyer,—cakes, bread, cooked fish, and beverages. They go from house to house and in a loud voice ask one to buy. One hears "Warroniji ribi" (baked fish) called by a voice which runs up and down through the whole scale until it ends in an uncanny, clear, sharp, piercing, hollow "i." We see these peddlers everywhere—in the town, on the highway, in the railway, on the deck of the steamers, and in the market places They have not been affected by the many changes of the past years and live and trade today still in the same old fashion.

These great towns, half city and half country, dot the broad plains of Russia. In these towns live millions of the many millions of Russia.

The roads in the Russian towns are much the same as they are throughout Russia. While Germany, France, Switzerland, and Austria were laying out an excellent network of roads for commerce and defense, the roads of Russia were neglected. In Russia enormous distances, lack of material, lack of skilled engineers, and the unfavorable climate made the building of roads very difficult. So there were only a few post roads built between the important cities, and then only if these cities were not connected by a waterway.

The many rivers of Russia have always afforded a possible trade route and for this reason roads have not been so necessary. Then, too, the many swampy shores of these rivers have made long bridges necessary. As few Russians were trained engineers, the bridges, even when built,

were so insecure that they were not used if they could be avoided. And further, when railroads were built, the government gave up repairing the roads. Since the roads were not made suitable to wagons and sleighs, the wagons and sleighs were suited to the roads. All vehicles were of light construction without solid joints and without springs. The different parts were connected by cords of bast and hemp. The large stagecoach, the ordinary covered post coach, the flat peasant sled, the large traveling sleigh, and even the city sleigh are all built so that the breaking of an axle or other part is no great mishap.

The poor condition of the roads is partly due to the character of the people, as expressed in the oft-repeated word "nitschewo" (nothing). If one asks a Russian how he is, he answers, "Nitschewo"; if one expresses a fear, it loses its force by a calm "Nitschewo"; if one complains of the impassable roads, the Russian's reply is "Nitschewo."

Each Russian town is fortunate in having a public bath. This bath is nearly always found even in the smallest village, where it is often nothing but a square room with a great stove built into one of the four walls. This stove is heated very hot and then sprinkled with water until the whole bath is filled with steam. On the wall opposite the stove, is a wooden bunk on which the bather lies until his body is dripping with perspiration. Often the Russian bather hits himself with birch twigs to increase circulation. Then he washes himself with cold water. In winter the peasant sometimes runs from the steam heat of the bath out into the snow. If there is no public bath in a village, the baking oven has to serve as a bath stove; in cities the bath is often richly furnished.

During hundreds of years Russia has been struggling to gain a passageway to the sea for the products of her fertile farms, great forests, and rich mines. They could reach

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FIG. 238. Russia. Near the city of Saratov. This vehicle is called a tarantass, and it is used throughout Russia, not because of its comfort but because Russians, at least until recently, adopt new things slowly. What does the picture tell you about the weather? What season do you think it is? Why?

foreign markets to greater advantage if she could gain such a passageway. This was in part the cause of Russia's wars with Turkey, her struggles with Sweden, her colonization of Siberia, her conflicts with Japan and with England, and finally her entrance into the World War.

It was this desire to reach the sea which made Peter the Great send his armies against the King of Sweden with the result that he finally secured the Baltic provinces on the sea. It was the same desire which made him found the new capital of St. Petersburg, since known as Petrograd and now as Leningrad, to take the place of the old inland capital, Moscow.

It was not an easy task which Peter the Great undertook when he founded this city at the mouth of the Neva River and on the frontier of the newly acquired territory. The site was on the swampy delta islands of the river, and both swamps and woods made the task very difficult. But he had gone to Holland disguised as a shipwright, and there he had learned how to master the lowlands. He soon built the fortress of St. Peter and St. Paul and a cathedral by the same name on the northern island in the delta. Later he constructed shipbuilding yards toward the south. The city on the "pile-studded marsh" grew very rapidly. Later the swamps were drained and the city spread out over all the islands and adjoining mainland. At the end of two hundred years it was a beautiful city and its population in 1914 was more than two million.

Leningrad lies just below the parallel of sixty degrees In the summer it has long days and "white nights"; in the winter the days are very short and the weather is cold and disagreeable. In spite of this, the great determination of the Russian czars succeeded in making the city a beautiful place for their residence. They gave it a setting of which no capital in the world need be ashamed.

Leningrad was not only a port from which raw materials

were shipped but also one to receive foreign goods; it was the gate through which the civilization of western Europe entered Russia. It was the gateway through which entered German customs, German names, German architecture, and German art. Italian architects, sculptors, artists, and musicians were welcome guests as far back as the eighteenth century. Because it was the seat of the Russian court, Russian nobles gathered there and it became a city of beautiful palaces. Russian and foreign students, artists, government officials and business men met there. In this way Leningrad took on its half western-European, half eastern-European look, which makes it so very different from Moscow, which is purely Russian.

Leningrad is a city of bridges. More than one hundred have been built to join the many islands and to span the Neva River. It is also a city of beautiful churches. If one wished to visit all the churches it would take several weeks, for there are two hundred fifty of them. They contain wonderful pillars of beautiful stone, rare mosaics, figures of pure gold, and statues inlaid with jewels. Their bright-colored rounded cupolas are very different from the domes and steeples of western and northern Europe.

Leningrad was the center of Russian industry until 1914. This was because it could ship its products direct to the markets of Europe. It could also secure raw materials for its factories from the interior of the country and Siberia by many important railroads. Russia's industry is not old. For a long time the rich treasures of the country lay unused because the people were content to exchange grain, furs, and logs for the manufactured goods of western Europe. After industries began, one could always see along many of the Russian roads peasants who did not have enough land to make a living, and who were going to the cities to find work. When they reached the cities some became coachmen and janitors but most of them

became factory workers. They lived in the outskirts of Leningrad, and there built the typical Russian houses which are seen in the smaller towns.

Leningrad and Moscow have been for many years the two largest cities of Russia. While Leningrad resembles

Courtesy International Committee of Y. M. C. A.

FIG. 130. Russia. The City Hall and Cathedral of St. Basil at Moscow. Notice the shape of the domes which are typical of the Russian churches.

the cities of western Europe, Moscow has remained purely Russian. "Mother Moscow," as the Russians fondly call it, was the capital of Russia until the court was moved to Leningrad. It is again the capital of Russia. Moscow is a very old city and has passed through many troubled times. Twice, in its central position on the great plain, it was attacked by invading Tartars and burned to ashes. In 1812 its flames turned Napoleon back and forced him

to begin his disastrous retreat. From its ashes Moscow arose more rich and beautiful than ever before.

An early writer in describing Moscow said that it was a collection of several hundred palaces around each of which was a village and gardens. Now all has been changed. The villages have been united, the network of streets has been completed and these changes, together with street car and electric light systems, a public water supply, and public baths, have given the place the air of a great city. However, Moscow has remained the age-old Russian city. By the side of wonderful palaces, rich churches, elegant hotels, Parisian shops, and fashionable boulevards we find real village streets. Those streets still have miserable wooden huts with tiny windows that tell a story of misery and distress.

The Kremlin is the oldest part of Moscow. It was built as a fortress on the bluff overlooking the Moskva River and its surrounding wall has protected it through the ages. It includes within this wall the former Imperial Palace, the arsenal, cathedrals, monasteries, convents and other imposing buildings. All the year round, the mighty Kremlin is the goal of thousands of travelers from Russia and foreign lands, for it is a museum of Russian history and life. It may well be said, "He who has not seen the Kremlin of Moscow has not seen Russia."

In front of its six gates the throngs jostle each other ceaselessly. As they pass through the Gate of the Redeemer, each one reverently uncovers his head. Entering, he sees a strange collection of buildings. The oldest are half Tartaric in design; others are Byzantine; many are fantastic; all are furnished with great wealth. There is the Church of the Assumption in which the czars were formerly crowned; St. Michael's, which was the burial place for the Russian archdukes; and the Church of the Annunciation with its nine cupolas.

From the top of the high bell tower of Ivan the Terrible, one can look out from the Kremlin over a sea of cupolas, gleaming with gold and bright colors. No city in Russia has so many churches as Moscow. In addition to the four hundred Russian churches, there are numerous Roman Catholic and Lutheran churches, Jewish synagogues, and Tartar mosques. On the outskirts of the city is a background of picturesque woods, castles, and gardens.

Outside the Kremlin lies the commercial part of Moscow. Another part called the White City is the social center. There one sees beautiful hotels, theaters, and clubs. Along the boulevards Russian trotting teams race up and down. The theaters which were once filled with the old nobility and rich merchants are now filled with the officers of the new government. The shops display expensive products of foreign and domestic make. The factories of Moscow must keep busy in order to supply most of the needs of the new capital.

Moscow is the center of the country not only because of its location; it has long been and still is the great trade center. Here, as formerly, are stored the goods which are to be sent to all parts of Russia. Into the great warehouses pour the grain from the fertile central provinces, metals from the Ural Mountains, wood products from the north, furs from Siberia, wool from the south, tea from China, and cotton from Transcaucasia. Railroad lines radiate in all directions from Moscow and carry goods to all parts of Russia and even across Siberia to the Pacific Ocean.

Most of the Russians belong to the Slav race, the same race to which the Poles and Czechoslovaks belong. There are the White Russians who live in the northwestern part; the Little Russians who live in the region of Ukraine; and the Great Russians who are scattered throughout all Russia and who are greatest in numbers.

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FIG. 140. Russia. A portion of the Kremlin at Moscow. The picture shows the former Imperial Palace at the left and two of the cathedrals. Notice the wall and its towers. The Moskva River is in the foreground.

There are many people in Russia who are not Slavs, and the most interesting of these are the Tartars. Long ago they were a tribe of wild horsemen living on the steppes of Asia. To the west of them lay the broad and fertile plains of Russia and still farther west rich farm and forest lands. These warlike nomads packed their tents; the rich plains lured them westward; their trusty steeds carried them. They invaded Russia and pressed forward even into Hungary and Germany. There most of them were turned back, but on the steppes of Russia they conquered many of the inhabitants and formed the states of Kiev, Kazan, and others. For a long time these Tartars were the terror of Europe, and the princes of Russia paid them tribute. As you have read, Moscow was twice burned by the Tartars. But a great change has occurred from that time to the present day. Although the memory of the heroic deeds of their ancestors still lives in their minds, these people are today as peaceful and industrious as bees.

Most of the Tartars today live in the region around Kazan, Samara, Orenburg, and the Ural Mountains. Another group lives in southern Russia around Crimea. The Crimean Tartars are now mostly shepherds and prosperous gardeners. The majority of the Tartars are engaged in trade and commerce. No one would have suspected that these fierce nomads would have become such excellent merchants. Almost all the great trading houses so common in Russia are owned by Tartars. They also control the foreign trade between Russia and the eastern countries. In their great wholesale houses all the beautiful stuffs of Asia are collected,—weblike fabric from India, shawls and silks from Persia and China. In summer time these goods are carried to western Russia by rail or by long caravans of wagons; in winter they are packed on great sleds. Many of these Russian Tartars are peddlers. One sees them on ships and trains and in towns selling

their woolen and other goods. They are such good salesmen that it is difficult not to buy from them.

The Tartars have adopted the language of the Great Russians, but in many other ways they differ from them. They no longer live in their tents, but neither have they adopted the Russian house. The simple Russian house generally has one large room which extends along the street. This is used by the family as living and sleeping room. A smaller room is used as nursery or store room. The Tartar house has a central hall. On one side is a room for the family; on the other side is a room for guests. And guests are always welcome in these Tartar homes.

The Russian stove is not found in the Tartar home. A smaller stove serves for warming the room and for cooking. In front of the stove stands a bench with a tin or brass wash basin and pitcher, for the religion of these people commands them to wash several times a day. Along one wall there is a wooden bunk covered with rugs and pillows. This reminds one of the homes of the Turks, who are related to the Tartars. Like the Russian home, the Tartar home always has its samovar, and tea is almost their only drink.

Although the Tartars have adopted many of the Russian customs, their religion has not been influenced by the religion of the Russians. The Tartars are followers of Mohammed and the Koran is their sacred book. All the boys are taught to read the Koran. One can find few Tartars, even among the women, who cannot read and write. Are you not surprised to find that true, when you know that few Russian peasants can write their own names?

Instead of churches, all Mohammedans have mosques for places of worship. Women are not permitted to enter these mosques. Five times each day all the faithful are called to prayers. After washing themselves and removing

their shoes, they enter the large prayer room. During the final prayer, all faces turn toward Mecca, the birthplace of Mohammed. Every Tartar responds to the call to prayer. If he cannot go to the mosque, he throws himself upon the ground and says his prayers. On a journey he carries his prayer rug with him and prays without noticing the curiosity of his fellow travelers.

These Tartars are an important part of the population of Russia. Their lands cover a large area; they have been of great help in the development of Russia; today they occupy important places in the new government.

This interesting country of which you have read is likely to become very important in the future. European Russia has a larger population than any other country in Europe. It has a very large area, covering almost half of Europe. It also has great wealth in its soil, its forests, and its mines. Its farms produce a billion bushels of oats and also the same amount of rye each year. These are used at home. Rye bread is the common bread of the peasants while the oats are fed to the many horses which are raised in the country. Russia produces a large amount of wheat, some years producing more than the United States. Much of the wheat is exported from Odessa. Before the World War, Russia ranked second in the production of potatoes and sugar beets. And she produced more than three-quarters of all the flax fiber of the world.

Russia is rich in timber. More than one-third of all her area is covered with great forests and these furnish wood for home use as well as large quantities for export.

Russia also has rich mines. She has good coal and iron in the region near the mouth of the Don River. In the Ural Mountains are great quantities of platinum and in normal times Russia produces ninety-five per cent of the world's supply. This platinum is very valuable in electrical and chemical industries. Russia supplies one-half of

the manganese of the world and it is valuable in the steel industry. She is a large producer of petroleum. The main oil district is in the Caucasus region near the city of

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FIG. 141. Russia. This crude method of grinding grain is still used in the rural districts of Russia.

Baku. Besides all of these important minerals, there are smaller supplies of gold, silver, lead, copper, sulphur, zinc, quicksilver, salt, and asbestos.

All of these resources furnish raw materials for manufacture. Before the World War, Russia had three areas in which manufacturing had developed considerably,—

the area which is now a part of Poland, the region now known as Ukraine, and Moscow. But Russia was not, and is not, a great manufacturing nation. Her great stores of raw products can furnish large quantities of materials for Russian factories providing those are developed. The raw products can also be sold in other countries. These great stores of wealth should become the foundation upon which Russian prosperity is built.

Attack and war on Poland by Germans under Hitler
Warsaw fell Sept 29, 1939

POLAND

The name Poland means the country of the plain, and Poland deserves its name. Its southern boundary lies along the Carpathian Mountains. From there the land slopes towards the Baltic Sea. The plain of Poland joins the narrow German plain on its west to the wide Russian plain on its east. Thus, all of Poland lies on the great European plain except its mountainous region at the south.

We shall study its two types of country and our first visit will be to the beautiful mountain region. Would you like to visit a mountain region in which the numerous tiny lakes are so beautiful that they are called "the eyes of the sea"? That region is in Poland, in the high Tatra Mountains, the highest part of the Carpathians.

As one journeys up the Tatra Mountains one finds the lower slopes covered with dark forests of fir. We wonder if this is where all the Christmas trees for Polish children are cut. Higher than the forests one finds low shrubs and grass. Still higher, the peaks are naked, jagged, precipitous rocks boldly pointing toward heaven. In the upper valleys, in the midst of craggy slopes, are beautiful mountain lakes. Their hues vary from turquoise to shades of dark green and blue. Viewed from near by, these little lakes glitter in the sun. In the shade they appear dark and sullen. When seen from a lofty peak, as they lie at

Fig. 142. Poland. Mountaineer from the Tatra Mountains. Notice the heart-shaped embroidery on his trousers, the leather girdle with the bronze buckles, the sheepskin jerkin, and the "stick-ax." The feather in the hat is generally from a pheasant or a peacock. The embroideries are very bright colored.

the bottom of the valleys, they look like so many peacock's feathers framed in gray stone. Here and there one has glimpses of roaring mountain torrents, pure as crystal. They hurry over rocks and bowlders until they become mountain rivers. On the northern slopes the streams join the Vistula. On the southern side they flow into the tributaries of the Danube.

When viewed from afar, the Tatra Mountains appear, in the hazy mist, like castles built of amethysts, of pearl, and of silver. Patches of eternal snow lie in the northern clefts of the summits. The valleys lie peacefully below. The forest glades, heated by the sun, smell sweetly of raspberries, strawberries, and the resin of fir trees.

Most of the people of the Tatra Mountains live in the valleys. Some of them still wear their picturesque old peasant costumes. Some of the men's garments are made of material which is quite unfamiliar to us. The mountaineer women weave a coarse cloth of wool. It is then "fulled" in the fulling mills which are run by the swift mountain streams. In fulling, the cloth is moistened, pressed and becomes thick, hard and white as snow. This material is only made into men's clothing, and by skillful country tailors. Each man is gay in his costume. He looks slim and agile in tight trousers, made of this heavy white material and trimmed with dark blue stripes down the outside seams. The front pockets are embroidered with bright-colored wools in a heart-shape design. He wears a white shirt, formerly made of homespun linen. A broad leather girdle is fastened around his waist by means of heavy bronze buckles. A short, sleeveless sheepskin jerkin, embroidered in bright colors, adds to the gaiety of his costume. On colder days, he throws a brightly embroidered coat loosely about his shoulders. On his head is a small black felt hat, trimmed with a band of tiny, glossy sea-shells and the feather of a pheasant.

The women are brightly dressed, too. Each wears a colored flower-patterned skirt, a sleeveless bodice over a white linen blouse, and a white embroidered apron. On her head is a bright kerchief, and, if she is prosperous, she wears a string of coral beads. Like the men, the women have warm outer coats to throw about them, for in the winter these highlands are very cold. The gay dress of these simple peasant folk adds great charm to the scene. Especially on Sundays, when crowds gather around the village churches, the white slender figures of the mountaineers mingled with the gaily dressed women make a scene long to be remembered.

These mountain people produce only small crops of potatoes and grain, but raise hay in abundance. They are artists in mowing their uneven land. After the hay has been gathered they dry it most carefully, for none must be wasted. The drying is no easy task. The climate is very rainy, and it often happens that the hay is no sooner spread out in the sun to dry than it must be put back in stacks for protection against the rain. Sometimes it must be spread over and over again. During the haying time all the land is fragrant with the new-mown hay. When it is all dried, one sees the small mountain horses skillfully drawing their cartloads of hay down the narrow mountain tracks. In the winter time, the peasants feed this hay to their live stock.

They raise many red cattle, from whose milk they make a large quantity of good butter. They also raise sheep which furnish the wool for their home-spun cloth. Each peasant owns some sheep. A rich peasant owns a hundred or more; a poor man, two or three.

As in Norway and the Alpine countries, the high mountain pastures are of great value. Both cows and sheep graze there all summer long. There one finds small, wooden, chimneyless huts, with smoke issuing through the door

or a hole in the roof. There shepherd boys live in the summer under the guidance of an old and well-trained master shepherd. To him the owners trust their flocks, and the young shepherd boys carry out his orders. The shepherds milk the sheep and make cheese from the milk. The cheese is molded in small, oddly carved wooden casts and is considered a great delicacy. The cows' milk is frequently soured by a peculiar process and put aside for winter use.

The young boys, aided by dogs almost as shaggy as the sheep, watch the flocks. The innumerable little bells on the sheep tinkle softly in the mountain stillness. When rainy weather comes, the boys turn their sheepskin jerkins outside-in, and the wet weather does not dampen their spirits. At nightfall, they sit around the fire in their rude huts, singing and playing bagpipes or queer-shaped violins. With stick-axes in hand, they do odd mountain dances, as in ages past. In these mountain pastures all life continues today much as it was many hundreds of years ago. It is a spot of quiet life almost untouched by the hurry of modern civilization.

When the first frosts come in September and the first snow falls, the flocks turn homeward. With merry jingling of bells and bleating of sheep, the white flocks move down into the valleys. Their return is heralded by clouds of dust along the roads. They often pass through many villages before they reach their own homes where they spend the winter.

At the foot of the Tatra Mountains one finds many mountain villages. These are charming places, for the hardy mountaineers have their own style of architecture. The houses are made of beams, carefully hewn. At the corners the beams are firmly dovetailed into each other, and then the chinks are carefully stuffed with moss to keep out the cold winter winds. The shingled roofs are high

and steep so that neither the summer rain nor winter snow will collect there. The door and the windows open toward the south, for in winter a cold wind blows from the north. The door posts are richly carved, the beams of the ceiling are also beautifully decorated, and all of the household furniture and utensils are similarly made. The white-clad men and gaily dressed women and children form a picture full of unique beauty, and make such a village an unusually charming place in which to spend a few weeks. At some of the villages one finds many tourists, enthusiastic mountain climbers, guided by the picturesque Polish guides.

The mountain region is very beautiful but of little value for farming. We must now learn more of the plain of Poland, most of which is excellent for agriculture. Few countries in all Europe have richer agricultural lands than Poland, and most of the people make their living on the land. In the north and west are great fields of grain growing on the estates of wealthy farmers. In the south, the hills and valleys look like a great chess board, for the land is divided into narrow strips. The population is dense and each man's land is divided, at his death, among all his children.

The people of the rural districts are mostly Polish and Ruthenian peasants. Both belong to the Slavic people. While their languages and customs are somewhat alike, there are many differences which separate the two groups of people from each other. But whether Polish or Ruthenian, most of the peasants are very poor. For centuries many have had to work for the Polish noblemen on the large estates. They cultivated the land while the noblemen were enjoying themselves on shooting trips or in other festivities. Others who cultivated their own land could not make a comfortable living because their tracts of land were too small.

If we visit one of those small landholders in the autumn, we shall see the father plowing his narrow strip. On the ridge, his son is tending a red cow and its calf. The grass is scanty and the cow is not satisfied. It strives to get

FIG. 143. Poland. Young peasant mother and her little daughter, in the dress worn in the neighborhood of Krakow.

away, tempted by the green meadow close at hand. But that is the neighbor's meadow. The son wonders why they do not buy the meadow, and the father is thinking that some day he will have the money to purchase it.

The problem of how to secure more land has long been in the minds of the peasants. It has been solved in different

ways. Some of the peasants have gone to the cities to work in the factories and there earned money to buy land. But there are not enough factories in all Poland to furnish work to the many people who need it. Many have come to the United States. Here they have worked in mines, in building railroads, in factories, and in other kinds of work. From their earnings many have sent money back to Poland to buy the much coveted land. Others have sent money for their families to come to the United States. Before the World War, 80,000 people left each year to come to the United States. Many others, more than 160,000 each year, solved the problem by going to Russia and working during the summer season on the estates of the large landholders. In the fall they returned with their wages, and by saving their earnings from year to year they, too, were able to purchase an extra piece of land. Since the formation of the Republic of Poland, some of the large estates have been divided among the peasants.

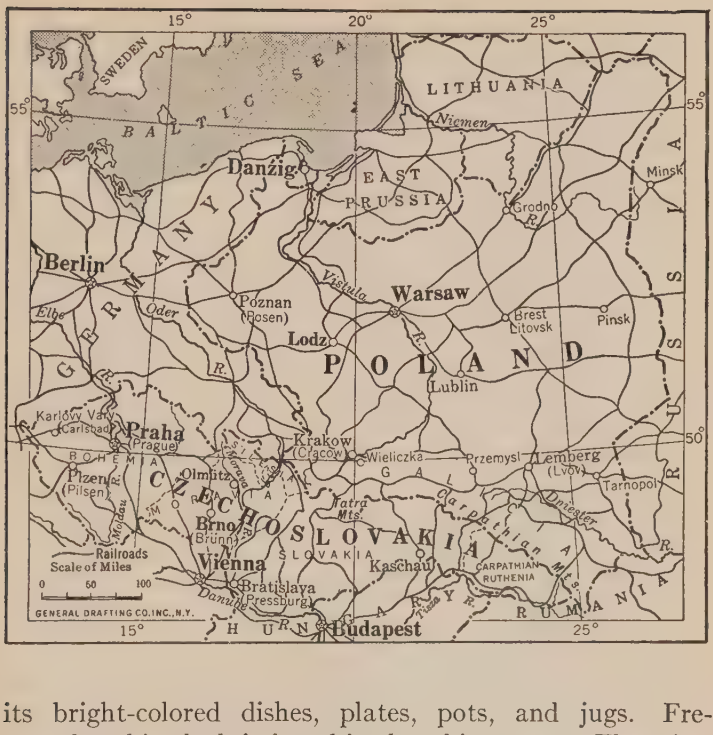
It would be well if enough factories were established in Poland to give work to the hundreds of thousands of workmen from the dense country population. Then a father could leave all of his land to one of his children. The rest could make a good living working in the factories. At present, new factories are being built, but it will take many years before work is furnished for all who need it.

Because so many of the Polish peasants were very poor, it was easy for other races to get control of the trading. Consequently, much of it has fallen into the hands of the Jews. There is a larger percentage of Jews in Poland than anywhere else in the world. The Jews have their own communities, their own social life, their own language, and their own customs. They also have their own peculiar dress. Many of the men wear a long black gown over their plain black garments and one recognizes them by those gowns. In the past years these Jewish traders

were almost necessary in the lives of the Polish peasants. They bought manufactured products in the cities and, as peddlers, carried them to the most distant villages. They were also traders in the larger towns. Besides, they were of value to the nobleman, for they sold the crops for him and, in times of need, loaned him money.

In the region of the Carpathian Mountains, many of the peasants live on their farms instead of in villages. Leaving the road and entering the farm gate, one is in the midst of a little garden where the country woman grows her gay summer flowers. Beyond are the house, the barn, and the stables, all made of wood. Behind the dwelling is the threshing floor on which the peasant threshes his own grain during the winter. Beyond that are the orchard and the vegetable garden. Near by is the well with its big sweep and bucket hanging at the end of a long chain. Still farther back of the farm buildings are the long rows of fields.

Entering one of the simpler homes in this region, one finds two rooms, the black room and the white room. In the black room the family meals are cooked and all the other everyday work of the household is carried on. Around the big stove, made of Dutch tiles, the family gathers during the cold winter. But the calves, pigs, sheep, and fowl also find refuge there. The black room is so called because these Polish farmhouses have no chimneys. The smoke from the stove has to find its way out through a hole in the ceiling or through the door or window. And so the walls become very black. In the white room there are beds, spinning wheel, and loom. The bed is usually covered with a great number of gay-colored cushions and blankets, and a peasant's wealth is often measured by the size of the bed. The walls are decorated with pictures and images of the saints. Along the wall runs a small shelf with its edge richly carved. There the family keeps



its bright-colored dishes, plates, pots, and jugs. Frequently a big clock is found in the white room. There is a bench close to the window and in front of it is a large maple table. Beside the wall are large chests where the women keep their holiday finery. As the Poles are fond of bright colors, these chests usually have many colored flowers painted upon them.

Many of the farmers on the plain live in villages rather than on their farm land. These lands are rich soil, due to the natural irrigation afforded by the Vistula River and its tributaries. Rising in the Carpathians, it sweeps across the fertile plains to the Baltic Sea. Villages and towns are centers of the peasant life in this region. There are many

small towns dotting all the agricultural district of Poland. Here the roads from all the near-by villages meet, so that the small town is a center of the surrounding region. Here the products of the villages are sold every week or fortnight at the market place. Then the otherwise quiet town is crowded with farmers' wagons. The horses, unharnessed, stand munching their hay and oats. The peasant men and women are there, dressed in the garb of the region from which they come. They are bargaining with the traders. They finally make a sale of their butter, cheese, eggs, grain, fowls, and vegetables. Their next task is to find the shops where they can secure a few simple household necessities or tools for the farm.

Special markets are held for live stock. On those days the little town is full of lowing cows and squealing pigs. The horses alone are less noisy. You see some of the men trying out the paces of the horses, for the Poles are fond of fine horses. When their trading is done and they have had a sociable day, the peasants return to their work on the farms.

Poland also has markets where manufactured goods are exhibited and sold. Poland's factories produce many articles which are needed in the East; the East produces many raw products which are needed to keep the factories running. The city at which many tradesmen from both the East and West meet is the old Polish city of Lemberg. Each fall they hold what are called the "Eastern Markets," the largest fairs in Poland. There one sees rows of booths, pavilions, and shops. Iron goods, machinery, and tools occupy a large place. Beautiful cotton, woolen, and silk cloth is exhibited from Lodz, the Polish Manchester. There is a counter filled with dyes in hundreds of beautiful shades. Some of the pavilions are fragrant with perfumes and soaps. One is surprised to find portable houses for sale. Furniture, carriages, and wagons are displayed.

Courtesy Polish Bureau

FIG. 144. Poland. Interior of a peasant's home near Warsaw. The man is weaving a basket. Many geese are raised in Poland. What product from geese do you see in the picture? What tells you that this peasant woman works hard?

There are weapons, clocks, watches, petroleum, and lubricating oils. Over there you see a number of little children with their hands on the edge of the counter. They are trying to see the many interesting playthings. How they covet some of the chocolate and the sweetmeats!

One hears at every step a new language, for it is not only from eastern and western Europe that traders come. They come from all parts of the Balkans and even from Asia Minor. The traders are alert and eager. They talk rapidly and make hasty calculations. Some ask questions; some give explanations; others examine the wares most carefully. At the close of this great fair many of the traders have learned of new goods and many orders have been taken.

The Poles belong to the Slavic race, as do most of the Russians, Czechs, Serbians and other Balkan people. Like the other Slavic people, the Poles are fond of music and of dancing. You remember that Paderewski, the famous pianist, is a Pole. The Poles give many of their free hours to music. Every festivity is opened by music. The villagers enjoy their old national dance in the market place or in the meadow on a warm summer night. The dance is accompanied by soft sad melodies which suddenly change into wild ones. The dance changes as the music does. The couples stand near each other in a large circle. They begin with slow steps and graceful movements. Suddenly the rhythm changes; the men go on dancing in wild bounds; then squatting down they very skillfully bend and stretch their legs.

The Poles have many customs which are connected with their church festivals and with their harvest. Their supper on Christmas eve is one of them. The women and young girls spend the day before in cooking and baking. At nightfall, when the preparations are all finished, the father of the family enters the room. In his hands he

carries a small bunch of hay and straw and other products of the field which he has harvested during the year. He puts these on the table and covers them with the white cloth on which the meal is to be served. As soon as the first star begins to sparkle in the sky, the whole family kneels down and thanks heaven for all the gifts of the year. Then they sit down to their solemn meal. When it is over, they all kneel down again to say a prayer of thanks, after which they sing a religious song. At midnight the family attends church. Even if the church is far away in another village, they attend. They saddle the horses or hitch them to the sledge. Through the stillness of the winter night the merry bells ring, and kind words of greeting pass between the church goers. But sometimes they hear the howling of the hungry wolves from the distant woods.

These densely populated country areas with their rich soil raise enough food for home use, also a surplus for export. Grains, potatoes, sugar, cattle, geese, bacon, butter, eggs, and fruit are exported. These exports pay for the raw materials, cotton, wool, and Swedish iron ore, and for the machine tools, agricultural machinery, Norwegian fish, and manufactured goods which must be imported. Many of Poland's industries are supplied with raw products from her own farms. There are many refineries where sugar is made from sugar beets; distilleries where alcohol is extracted from potatoes; and many breweries.

While Poland is mainly an agricultural country, it also has some other industries. Western Poland is dotted with great factory towns which resemble those of Western Europe. There are many great textile mills at Lodz and Warsaw which manufacture cotton, woolen and linen goods and jute. The farther one travels eastward, the rarer become the large towns. Eastern Poland is entirely a farming region and in this respect resembles Russia and all of East Europe.

Poland has very valuable mineral resources which aid her industries. Her greatest riches lie in the coal district in the region of Krakow. Before the war, when Poland was still divided among her three neighbors, the great coal fields lay where those three nations met. The largest number of mines and factories were in Silesia, a part of Germany. The second largest coal area belonged to Austria and the smallest to Russia. That combined area is one huge mining and manufacturing region. Many chimneys, gas tanks, water towers, furnaces, railroads, overhead cables, piles of refuse coal and factory rubbish are seen everywhere. Here and there are small pine woods, cultivated fields, and peaceful meadows. Beyond are neat cottages and well-kept gardens. Then appear more chimneys, clouds of black soot, and the glare of furnaces. The din of machinery, the whistling of steam engines, and the rattling of railway trains are heard. Then appear more fields, tiny villages amidst their gardens, and towering church spires. A portion of this great coal region now belongs to Poland. Other parts are owned by Germany and Czechoslovakia.

This wealth of coal furnishes the fuel necessary for the many factories of western Poland, especially for Lodz, the great center of the cotton, woolen, and jute industries. It also furnishes fuel for Warsaw with its great machine factories. Much larger quantities of Polish coal can be mined in the future, and that coal could be used to develop greater and more varied industries.

Poland also has large oil deposits at the foot of the Carpathian Mountains. These are especially important, for there are only a few large oil fields in all Europe. Poland also has large deposits of potash, which is valuable as fertilizer. The only other deposits of potash of equal value are in Germany. Poland has rich zinc mines and produces one-seventh of the world's output of zinc.

Besides, there are smaller mines of lead, nickel, and other metals.

Poland also has great salt mines. A few miles from Krakow is a small town of great interest to children. At the close of each school year hundreds of Polish children, with their parents, may be seen arriving on the train.

Courtesy Polish Bureau

FIG. 145. Poland. Mining salt in the mines of Wieliczka.

Their merry laughter enlivens the streets of the little town. Soon they are on the way to the huge underground chambers of the great salt mines. This interesting place is called Wieliczka.

The children immediately notice two tall shafts which lead to the mine. In the distance, outside the town, they notice others. The sight-seers are directed to the passenger shaft, and choose whether their trip into the mine shall

be made by elevator or by way of the stairs. Before starting down, they don a miner's garb to protect their clothes.

The rock-salt in this wonderful mine is found at seven different levels, which are separated from each other by layers of other rock. The children pass several levels, but they are not permitted to go to the lower levels where the miners are at work. So they begin to explore some of the deserted areas. They seem to be in the midst of an underground city. They visit a great vault with floor and ceiling and walls all of salt. There are columns of salt, carved statues of salt, and even the candelabras are carved from the rock-salt. The guide leads the sight-seers through long and sometimes winding passages. They go over wooden bridges and up steps of salt from one great chamber to another. They see small ponds of water. Without a guide they would soon lose their way, for there are seventy-five miles of passageways in these great mines. Some of the vaults are more than fifty yards high. A whole church with a towering steeple could be set inside. From the vault of one hangs a cluster of three hundred candles and still the vault remains steeped in darkness. In the seventeenth century one cave was made into a chapel where even the pulpit is hewn from salt.

Finally the visitors reach a dark lake. They enter boats which glide very quietly over the water. The children generally make sure that the water really tastes salty! After their boat ride they enter the ballroom, where visitors very frequently dance at the end of their trip. Then they visit a cave which is used as a museum. In it are exhibited the different kinds of tools and machinery which have been used in mining during the hundreds of years in which the mine has been worked. The mine is even supplied with a buffet where the hungry visitors can secure a meal.

Courtesy Polish Tourist Bureau

FIG. 140. Poland. A chapel in the salt mines of Wieliczka. Floor, walls, ceiling, statues, chandeliers, and many other objects are made of salt. Do you notice any souvenirs which Polish children might buy to take home?

Each of the Polish children wishes to buy a souvenir to take home. Some select cubical crystals which are perfect in shape. Others select crystals in which are embedded pieces of twigs, leaves, or berries, all well preserved. Many purchase paper weights shaped like small books, little cottages, fruits, or animals. The children are happy taking their toys to the station in the hope of taking them home. But, alas, their delight is short lived. As soon as the precious paper weights are exposed to the outside air they gather moisture and dampen the papers on which they are laid.

For more than one thousand years the Polish peasants have been taking salt out of these mines. Today there are two thousand miners hard at work drilling out the salt. It is put in small cars drawn by horses that live in the mines. More than twenty-five miles of railroad run through the different chambers in which they are at work. This mine and another one in Germany are the two largest salt mines in Europe. When this Polish mine is exhausted, the nation can secure salt from more than five hundred salt springs which flow from the Polish side of the Carpathian Mountains.

The Vistula River binds together Poland's mountains, mines, farms, and factories. Most of Poland is in the basin of the Vistula River and its many tributaries. The Vistula is like the midrib of a leaf; its tributaries are like the smaller veins. This river system carries the life of the Polish people as the veins carry life to the leaf. In the Middle Ages, rafts loaded with timber and grain were floated down this river system to the sea. In the days before railroads, the Vistula was the only channel of trade. The cities grew up and prospered on her banks. Today, the Vistula in summer still carries great quantities of timber, grain, and the more interesting cargoes of apples, plums, and green vegetables. In winter the traffic on the Vistula

is checked by ice. But even in summer most of the river is not navigable by very large boats. There are many shifting sandbanks and shoals where loaded boats are likely to be stranded. It may seem strange that this river has never been regulated. But when Poland was divided, the Vistula River was also divided among the three neighboring countries. Its upper course was owned by Austria, the next portion by Russia, and the lower course by Germany. As a consequence, this important river was not well developed. Before the World War, Danzig, at the mouth of the river, did several times as much business by rail as she did on the Vistula. Large sums of money will need to be spent in dredging, diking, and making canals if the Vistula is made into an important commercial stream such as the Polish people wish to see.

When there were no railroads, the Vistula was of greater importance than at the present time. And so the old cities grew up on its banks and there they prospered. The Vistula begins its course on Polish soil in the midst of the Carpathian Mountains. Krakow, the gem of all Polish towns, lies on the banks of the Upper Vistula. Above the present city, there rises a hill crowned with a cathedral and the ancient castle of the kings of Poland. From there a great nation was governed; there lie the bodies of the kings and queens and Polish heroes. In Krakow one also finds an old Polish university, dating as far back as the fourteenth century. The entire city may well be called the treasure house of Polish history and the center of its science and its art.

Going down the Vistula, one comes to the quaint old town of Casimir, full of curious buildings. It was formerly a very busy town. Its market place has beautiful little Dutch houses, for during the Middle Ages Casimir carried on a trade in grain with Holland by way of the Vistula, the Baltic and the North Sea. Near the town still stand

the old granaries which are like ornamented strongholds. In these granaries the grain was stored until taken by boats to Holland.

By the time the Vistula reaches Warsaw, the modern capital, it has become a wide river. In Warsaw our attention is not claimed by the past but by the active present. Here one sees a great many factories. Warehouses line the shore. At the docks are many steamers, small boats, and rafts. The railroads from all Poland meet at Warsaw and make it a center of trade and commerce. Warsaw is the center of a large forest area and of a large agricultural district, and the products of the forests and of the farms are marketed there. The life of "old Warsaw" is carried on in the small quarter which surrounds the old market place. Here one sees Warsaw as it was when this was the home of an independent duke ruling the surrounding dukedom. The newer quarters have many beautiful eighteenth-century buildings made when the former kingdom of Poland was at its height. Now that Warsaw is again the capital of an important European state it is probable that it will have a rapid growth.

The Vistula does not flow all the way to the sea in Polish territory. The river leaves Poland and enters the Free City of Danzig. Danzig, or Newport, as its port is called, is the natural port of all Poland. It was a Polish port for hundreds of years. Then it became a part of Germany. Today Danzig is a Free City and Poland has the right to export and import her goods through it without paying duty. A strip of Poland called a "Corridor to the Sea" separates East Prussia from the main part of Germany to which it belongs. East Prussia lies next to the Free City of Danzig and it, too, has the free use of the port.

Poland could, with difficulty, develop a new port on her narrow strip of coast line along the "Corridor." But Danzig is their age-old outlet to the sea. There, Polish

exports are reloaded on sea-going ships and carried to all parts of the world. One sees Danish boats loading with grain, English boats loading with wood, and Norwegian boats bringing in English wares. There are German boats, too, and a few ships flying the Polish flag.

The new state of Poland is starting out rich because of her forests, soil, mineral resources, and people. From the east she can buy many raw products. Her factories can reach the markets of eastern Europe, which is always in need of manufactured goods. Along her southern boundary she has mountain streams from which water power can be developed. She has the use of a port through which she can reach the outer world. With peace and a wise government, Poland can probably reach her former place among the important nations of Europe.

January 1939, country to be taken over by Hitler.
The German element of the population pleased.

CZECHOSLOVAKIA

When Princess Mary of England was married she received presents made in all parts of the world. Many nations and peoples vied with each other in sending her their most beautiful products. Many people from Czechoslovakia were living in England and they, too, wished to give her a present. They finally selected beautiful pieces of Bohemian glass. This was a very suitable gift, as the manufacture of glass is not only one of the oldest and most famous of Czechoslovak industries, but it is also one of their most important industries today.

The mountains along the northwestern boundary of Bohemia furnish pure quartz and a snowy white limestone. The near-by coal mines furnish fuel. The forests furnish not only fuel but also the ashes which are used in polishing glass. Some factories make only cut glass; others make stained glass in which the surface is tinted and the design cut into the clear crystal. Some manufac-

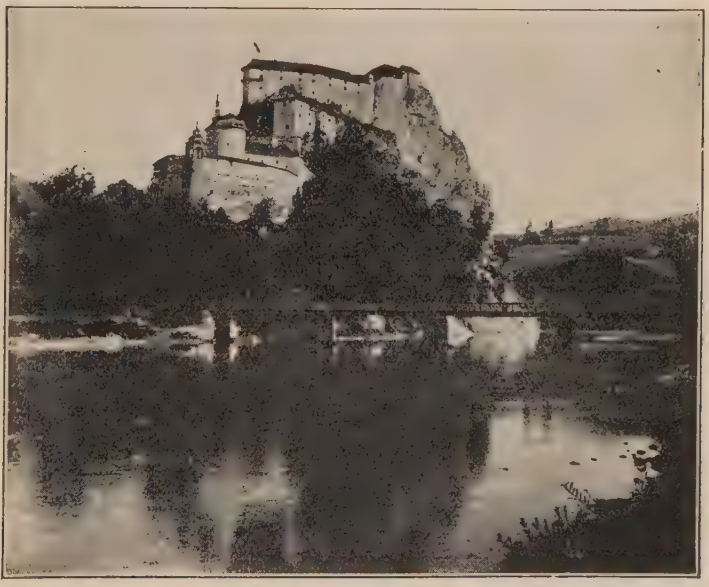
ture paste imitations of precious stones. Then there are factories for plate glass. One of the most important branches of the trade is the manufacture of pretty glass beads. These are exported to almost all the important countries of the world. Tourists traveling in Italy buy these beads for souvenirs, but, if they could ask them whence they had come, many of the beads would reply. "We came from Czechoslovakia." And if the children of the United States who live in the large cities should visit the stores and could ask the tumblers, goblets, and other pretty glass dishes the same question, some of the most beautiful would say, "We came all the way from Czechoslovakia."

What, and where, is Czechoslovakia, you ask. Czechoslovakia is one of the new republics of Europe. Just as the United States is composed of states, so Czechoslovakia is made up of five important provinces. Its three western provinces, Bohemia, Silesia, and Moravia, were a part of old Austria. The two eastern provinces of Slovakia and Ruthenia were a part of old Hungary. Now these provinces are united to form a new republic. Do you wonder why they joined together? They united because they were all of the Slav race. In this book, you have read of two Slav nations and you will read of other Slav people.

This new and active republic, Czechoslovakia, lies across the central part of Europe. It has the shape of a long gourd with its small end pointing to the east, and its large end extending westward. It is 600 miles from its eastern to its western end, but at some places it is only 50 miles wide from north to south. That seems to us like a very small country. Czechoslovakia may seem small when compared to our own country, but it is larger than England, more than four times as large as the Netherlands, and almost five times as large as Belgium. Eighteen countries of

Europe which are described in this book are smaller than Czechoslovakia.

Within its boundaries live 14,000,000 people, or an average of about 250 to each square mile. In the United States we have only 35 to the square mile. Does it seem



Courtesy Czechoslovak Press Bureau

FIG. 147. Czechoslovakia. A castle in Slovakia, where there are a few well-preserved old castles, built on the southern slopes of the Carpathian Mountains. Describe the country seen in this picture.

as if Czechoslovakia were too densely populated? Let us see. England has about 670 to each square mile and Belgium has almost as many. Connecticut is supporting more people to each square mile than Czechoslovakia, and Massachusetts and Rhode Island have almost twice as many.

Look at a relief map of Czechoslovakia. Bohemia is a diamond shaped basin with the four corners of the basin

pointing toward the north, east, south, and west. Mountain ranges form the four sides of the diamond. The northern point of the basin is lower than the others and through this point the Elbe River flows northward into Germany. You have seen a dish slightly tipped until its contents spill out over one corner. So the numerous rivers of Bohemia rise in the mountain margins, flow down to the center, and spill out to the north by means of the Elbe. The Elbe River connects Germany and Bohemia. Its valley has always been an important route of travel. Through it Germans and German influence have entered Bohemia.

Just east of the Bohemian basin is the shallower basin of Moravia. This, too, is mountain-rimmed but is roughly rectangular in shape. It is tilted toward the southeast and at that point its main river, the Morava, after collecting the water of the mountain streams, escapes from the basin and joins the Danube. This low place through which the river escapes to the plains of the Danube is known as the Moravian Gateway. In Roman days, and during all the centuries since that time, this gateway has been a main route of travel. Today it opens an easy route for trade between the Danube countries and the industrial and mining sections of Moravia, Silesia, and Bohemia.

The rest of Czechoslovakia is composed of the southern slopes of the Carpathian Mountains. Bohemia and Moravia are broad and fertile valleys rimmed by mountains; Slovakia and Ruthenia are made up of narrow valleys between rugged mountain ridges. In the northern part of Slovakia the well-forested Carpathian Mountains form a still more rugged home for the Slovakians. It is in the valleys which open southward from those mountains that some of the most interesting people of this new republic live,—the Slovaks, and the Ruthenians who in other parts of Europe are known as "Little Russians."

To the west of this new republic lie many of the old countries of Europe; to the north, south, and east of it you find several of the newly formed states. From your map you can find the names of these surrounding countries. Can you think of Czechoslovakia as a wedge of Slavs extending westward into the midst of French, Italian, and German civilizations which are centuries old? At its eastern end are millions of other Slavs, a strong peasant people.

The location of Czechoslovakia in the central part of Europe makes it important in European affairs. It is especially well located for trade with many of the countries of Europe. It lies midway between the Baltic and Adriatic seas. At the west lie the industrial regions of Europe; at the east, the agricultural and pastoral countries of the Balkans. Some of the most important trade routes cross Czechoslovakia. The tributaries of the Danube link the country with the main waterway to the Black Sea. Main railroad lines connect Praha (Prague), the chief city and capital, with Paris, Hamburg, Warsaw, Trieste, and other important cities. Unfortunately, Czechoslovakia has no coast line of its own. Consequently goods for the Americas must be shipped through another country. When peace was made at the close of the World War, Czechoslovakia was given the right to use the Elbe and Danube rivers without charge, and that will aid in developing its commerce.

Bohemia, the western province of Czechoslovakia, has long been known as the garden spot of Europe, and this name could also be applied to Moravia. Riding through western Czechoslovakia, one sees miles of sugar beet fields, for in normal times this small region produces almost one-fifth of the beet sugar of the world. It produces all the sugar required at home and exports more beet sugar than any other country except Germany. One-fourth of the land is covered with wheat, barley, and oat crops. In some parts you can see hop fields with their feathery blossoms.

Bohemia produces hops of the best quality and raises one-tenth of the world's supply. You could also see many large potato patches and fields producing fodder for stock.

There are many dairy cows grazing in the rich meadows. Czechoslovakia has more dairy cattle than Wisconsin, which is the most important dairy state in the United

Courtesy Czechoslovak Press Bureau

FIG. 148. Czechoslovakia. Interior of peasant home in Bohemia as shown in a folk museum. The furnishings shown are now being replaced by modern and less artistic ones.

States. There are many swine, too, which are fattening for market. Possibly the most interesting thing that you would see would be the large flocks of geese tended by the goose-girls. Or, in passing through a village, you might see the goose-man bringing some big, fat geese to market. Large quantities of geese are exported to western Europe.

While Bohemia and Moravia have broad farming lands, only the valleys are farmed in Slovakia. On the low hills

and upon the mountain slopes, there are great herds of sheep tended by lone shepherds.

Czechoslovakia has great wealth in her forests. Many of the hills and mountains which are too steep for cultivation or grazing are covered with great forests. It takes many, many years to replace trees which have once been cut; in fact, it requires many more years to grow most trees than it does to raise a boy or girl. So Czechoslovakia is fortunate in having large forests which furnish raw materials for many industries. The sawmills, the furniture factories, the toy industry, the paper industry, and factories for making musical instruments give work to many thousands of people. Czechoslovakia realizes the value of her great forest area. Five High Schools have been established to give instruction in forestry and the government has made some wise laws for the preservation of the forests.

Czechoslovakia has more valuable minerals than any of the other small European countries. Few of the large countries of Europe have a greater supply. There is so much coal that Czechoslovakia produces enough for her own use and some to export. She has her own iron also but imports by way of the Elbe and the Oder rivers Swedish iron ore to mix with it. Because Czechoslovakia has so much coal and iron, she has many industries and her prosperity depends upon them. The coal, and also the streams, furnish power to run the machinery. From the iron, the necessary machinery is made for the factories. Her dense population of hard-working people furnish the labor. Some of the raw materials are supplied at home while others are imported.

The textile industries are the most important industries in Czechoslovakia. There are large cotton mills which use raw cotton from the United States. There are others which use wool, silk, flax, hemp, and jute, much of which is also imported. Many of these textiles are sent to the

agricultural countries which lie southeast of Czechoslovakia. Others are sent to Austria, for Austria manufactures little for herself today. Some is sent to the United States, especially linen goods. If you will notice the goods in the

Courtesy Czechoslovak Press Bureau

FIG. 140. Czechoslovakia. Typical steel mill in Bohemia, which has long been noted for its great iron and steel industries. It has large quantities of iron and coal. How will these products help the country to prosper? Does this scene remind you of an old or of a modern city? Why?

stores you will frequently find an article labeled, "Made in Czechoslovakia."

There are important leather industries. Gloves and shoes are made for home use and also for export. Then there are famous brewing centers, such as Plzen (Pilsen). There are also the important glass factories of which you have already read. The metal industries are well known. Many of the metal workers have become very skillful and some of them are found in the factories of the United

States. All of the above factories, with the flour mills, the beet sugar refineries, the distilleries, and the woodworking factories, make western Czechoslovakia one of the busiest industrial sections in Europe.

Although Czechoslovakia is rich in resources, she has difficulties to face. Some of the same problems which are troubling other countries of Europe are also troubling her. There are two great problems in many of the European countries today. Czechoslovakia has to solve both of these problems if the country is to have peace and thus profit from its great natural resources. One is the question of keeping the different races satisfied. In many of the countries there is what is called a "majority" of people who belong to one race, and a "minority" of people who belong to one or more different races. The other question is how to get land for the people. This involves the breaking up of the large estates so that the peasants can own and cultivate their own land. You have read of other countries which have that problem. Since the birth of the new republic, a law has been passed giving the government the right to take over the many large estates in all parts of the country. The government officers are now subdividing the land, so that many people who did not own any can own small tracts.

In Czechoslovakia the question of the minority races is one which will need much study if the country is to continue peaceful. In the three western provinces of Bohemia, Moravia, and Silesia the majority are Czechs, but there are many Germans. When these provinces were a part of Austria, the Germans were the ruling class and there was ill-feeling between them and the Czechs. In the two eastern provinces of Slovakia and Ruthenia, the Slovaks and Ruthenians, both Slav peoples, are in the majority but there are many Hungarians. When these provinces were a part of Hungary, the Hungarians were the ruling

class and there was ill-feeling between them and the Slavs. The Czechs and the Slovaks are trying to make laws which will be fair to all. If they succeed in that, it will help their country to prosper.

There is another race problem in Czechoslovakia. While the Czechs and the Slovaks are both Slav peoples, they speak languages which are not exactly the same, and they have lived in regions that provided different educational and economic opportunities. In the western provinces there are very rich farming lands and many industries and resources, and those provinces were prosperous under Austrian rule. There, more than ninety-eight per cent of the people can read. In the eastern provinces much of the land is not suitable for cultivation. And besides, more than half of it was owned by large landholders who did not live on or cultivate their own soil. On those large estates the Slovaks worked and eked out a very scanty living. Many could not afford to send their children to school. Furthermore, during Hungarian rule, many rural localities did not have schools. Because of this, the majority of the people in the eastern provinces of Czechoslovakia never learned to read. So today the country has a prosperous western area and a backward eastern area. Since the west is rich and prosperous and the people better educated, they are more important in the government. Will they see that the more backward peoples of the eastern part have a chance to advance? The government has already established many rural schools in the east, and when people can read and write they are in a better position to help themselves.

Since Slav people form the majority in Czechoslovakia, the customs are very much alike throughout. Would you like to visit the homes out in the country? In Bohemia the homes are generally like those of the neighboring cities. But in Moravia charming old peasant homes are still very common. The women decorate the outside

Courtesy Czechoslovak Press Bureau

FIG. 150. Czechoslovakia. Slovak peasant costumes, designed and made at home. Much time is spent in making laces and embroideries. The pattern is an heirloom of the family. Each village has its own pattern and each woman introduces only some slight changes.

as well as the inside of the houses. On the outside they paint bright-colored borders as high as they can reach, using tulips and other flowers as a pattern for the design. Each flower looks so much like each of the others of the same kind that it is difficult to believe that the work is all

Courtesy Czechoslovak Press Bureau

FIG. 151. Czechoslovakia. Notice the fireplace in the right-hand corner. The interior of houses, as well as the exterior, is frequently ornamented with free-hand decorations in color and always by women.

free-hand. It is, however, free-hand work, and besides every woman makes her own design.

The inside walls are painted with similar patterns, especially in Slovakia. Bright borders are painted around the doors, the windows, and the fireplace. Boxes of flowers decorate the windows, and flower gardens fill the front yards. The bright, gay colors give an air of neatness, quaintness, and cheerfulness to these homes and their surroundings.

In their dress the people use the same bright colors and many of the same designs. The national costumes have largely disappeared in Bohemia but are often seen in Moravia. The women are gay in bright-colored skirts, white waists, and short puffed sleeves edged with lace. The gayest parts of the costume are the bolero, the big

Courtesy Czechoslovak Press Bureau

FIG. 152. Czechoslovakia. Moravian costumes.

sailor collar. the apron, and the cap. The bolero is made of rich embroidered material. The apron, often made of fine white mull, is the idol of every young girl's heart. There are rows of tucks followed by rows of hand-made embroidery from the bottom to the top. For strings the apron has two colors of ribbon around the waist, and these are crossed and carefully pinned in front. Of course these beautiful aprons are worn only on holidays. The women wear boots made of shiny leather. Then there is

a stiff little bonnet, with ribbons of many colors which hang down the back as far as the knees and stream out behind during a dance.

The men of Moravia wear gay costumes, too. They wear red trousers embroidered in the front in triangular patterns from waist to knee. Their shirts are white and have loose sleeves which come to the wrist. They wear boleros, too, but no other part of the costume is so gay as the many colored ribbons which are pinned around the neck and hang down in front. Their hats are round and small, and decorated with bright-colored chenille which is wound around and around. Their boots, like those of the women, are made of shiny leather.

The costumes of the Moravians differ somewhat from place to place. Each woman takes great pride in designing a pattern of her own which she uses over and over again. In the regions near the cities one rarely sees the old peasant costumes, but in the distant rural regions they are still worn on festival days.

In Slovakia the native costumes are very much like those described above. The poor people cannot afford any but the most simple costumes, and even the rich people wear plain ones except on holidays.

The women make beautiful embroideries and laces. The country girl uses her skill in decorating the home, and also in making attractive Easter eggs. She makes her own designs and then she paints, engraves, dyes, and etches the eggs until she has a choice collection. Then on Easter morning she carries the eggs as gifts to her friends.

In the long winter evenings, the men, older boys, and women in the rural districts make from wood toys, kitchen utensils and furniture. All are hand carved. If you could visit one of these simple homes in the winter time, you would find each one of the family busy. The little girls would be learning to knit. The larger girls would be sewing, embroi-

Courtesy Czechoslovak Press Bureau

FIG. 153. Czechoslovakia. National Theater at Praha. This building is called "The Golden Shrine." The people gave money to build it. Even beggars helped.

dering, or perhaps making gloves for some factory. Many of the toys made in these homes are sent to the United States for the Christmas trade.

Praha, or Prague as it was formerly called, is the capital of this rich Slav nation. Its location in Central Europe, in the center of Bohemia and on the Vltava River, near its junction with the Elbe, gives it unusual advantages. These waterways, and an excellent railroad system, connect it with all parts of Bohemia. As it is the capital of a newly formed nation, new railroad lines will need to be built connecting Praha with the two eastern provinces of the republic which formerly were a part of old Hungary.

Praha is a cluster of towns joined by many bridges, the most famous of which is the Charles Bridge. Each one of these towns has an interest for the traveler. It has been said that every "stone thrown at Praha carries a fragment of history." This is particularly true of the old town. Here is the famous old Town Hall and Tyn Church, both of which have looked down on much of the bloody history of Bohemia. The old moat, which once surrounded the old town, has been changed into one of the finest streets in Europe. Only Powder Gate, a tower, now marks the location of the old fortifications. It stands as a reminder of the past in one of the busiest sections of the city.

Near the old town is the old Jewish quarter. It is rapidly being replaced with modern buildings, but one would find much of interest there. The Synagogue dates from the thirteenth century. On the old Jewish Town Hall you would see a clock with hands which move from right to left instead of the way the hands of our clocks move. Here, too, you would find the Jewish burying ground, almost 1000 years old, the oldest Jewish cemetery in Europe. Many of the tombstones are still standing, but most of the inscriptions on them have been worn away during the passing centuries.

Across the river from the old town and the Jewish quarter is Hradcany, the Kremlin of Praha. Like the Kremlin of Moscow, it is a group of castles, cathedrals, monasteries, churches, arsenals, and gardens. Here the Bohemian kings lived and ruled for over 800 years. In the St. Vitus Church many of the royalty are buried. Each of the

Courtesy Czechoslovak Press Bureau

FIG. 154. Czechoslovakia. Bratislava (Pressburg) as seen from the Danube River. This city was, long ago, the capital of Hungary and is now the principal Czechoslovak port on the Danube, the gateway to the East. What products will probably go eastward through this port? Westward?

buildings speaks of the long ago. On the slopes of Hradcany are the palaces of many of the ancient Bohemian nobility. Some of these palaces are empty now and others are used for public purposes.

Among the many old buildings of Praha is the University. It dates from the fourteenth century. For many years students have come from far and near to attend it, and today it is the center for Slav students from all parts of

Europe. Thousands of young Slavs are in attendance from Poland, Jugoslavia, and Russia. Is it difficult to realize that this great university was founded and flourishing long before America was discovered? This is only one of several higher institutions of learning in Praha.

Praha has so many churches that it is called "the city of a hundred towers." It is also called "the rose of Europe" because of its many parks and gardens. Is it any wonder that travelers have always found this one of the fascinating cities of Europe?

Praha is also the most important center for industry and commerce in Czechoslovakia. There are many factories and industries using either domestic raw materials or imported raw materials. The different manufactured articles and products are chemicals, linen, leather goods, cotton goods, carpets, beer, flour, and railway equipment. Praha is also a very important sugar-manufacturing center.

Besides Praha there are other important cities in Czechoslovakia. Karlovy Vary, formerly called Carlsbad, is a well-known resort in Czechoslovakia, known chiefly for its so-called "cure-guests." Along the base of the mountains in western Bohemia are many hot mineral springs. Some of the most famous are located at Karlovy Vary, and it has been a favorite resort ever since the springs were discovered. There are many magnificent bathing houses, and hundreds of thousands of "cure-guests" come each year to drink and to bathe in the waters. Many other resort cities are found along the foothills. Brno (Brünn) is the capital of Moravia and is the center of thriving industries. Bratislava, or Pressburg, is a growing city and the most important port of Czechoslovakia on the Danube.

Of all the newly formed countries of Europe, Czechoslovakia is the most prosperous. She has many resources and the majority of her people are intelligent workers. Do you think that Czechoslovakia will continue to prosper?

Chapter X

THE DANUBE RIVER

The Danube is the only great river of Europe which flows from west to east. Among all the rivers of Europe, only the Volga River is greater in length and area of drainage basin. The volume of water discharged by the Danube is even greater than that of the Volga. The Volga is entirely within Russian territory; the Danube River flows through the heart of Europe and serves the people of seven nations. Can you name those nations? Which three of those nations have their capitals located on the Danube?

The Danube rises on the eastern slopes of the beautiful Black Forest region. In its journey through southern Germany, it flows through narrow mountain gorges and then through wide basins of level land. From the rock-bordered narrows, old robber castles peer out from amid the dark pines. In the distance, aged cities, with their high gabled houses, appear in the midst of rich fruit orchards and fields of grain. In this part of its journey the Danube receives many tributaries which rise in the glacier-capped Alps. It is in this portion that it receives its name of the "beautiful blue Danube."

The Inn River flows into the Danube near the boundary line of Germany and Austria. The gray glacial water of the mighty Inn mingles with the clear, blue-green Danube waters. From the north, a little stream flows from the upland moors of the Bohemian woods and adds its dark brown streak to the other two colored streams.

After receiving these tributaries, the Danube is able to

carry small steamers, although the Upper and Middle Danube are used but little for traffic compared with the lower course. Let us go down the river as passengers on one of the small steamers. On the left bank we notice

Fig. 155. The Danube River. Rafts of logs are built and floated down to Linz and Vienna.

ancient market places for wood. These markets are still piled high with the wood floated down from the Bohemian forests. We see rafts being built to carry the wood down the river to Linz and Vienna. We also see the fruit and vegetable boats along the shore. They are being loaded with pears, apples, and many kinds of green vegetables. Those boats will be unloaded at Linz and Vienna and then

will be towed back upstream, perhaps by steamers, but probably by horses.

Journeying on, we see tall willows and silver poplars twined with wild hops and other vines. Now and then a church tower or a ruined castle is visible in the distance. Peasant women are washing clothing at the edge of the stream. Soon the modern city of Linz appears, the chief city of Upper Austria.

Below Linz we meet boats of a new type, the salt boats. These are gay with flags and green branches, and carry great blocks of pressed salt from the rich salt region around Salzburg. At the front are two oarsmen; two others are in the rear. Other boatmen cook the meals under a rude board shelter and care for the horses which will be used to tow the boat on the trip back up the river.

Farther downstream we meet a tug with two or three steel barges in tow, each loaded with grain from Hungary or Rumania.

As we near Vienna, we notice that the rocky heights on either side are crowned with the ruins of ancient castles. One of these castles was once the worst robber stronghold

of the late Middle Ages. Every Austrian child has heard tales of its lord, who put an iron chain across the river and plundered all the ships which were thus forced to land below the fortress.

Fig. 150. A sailboat on the Lower Danube. In the background is the great Rumanian plain over which northeast winds sweep to the river and fill the sails of these boats.

We journey on and soon know that we must be very near Vienna. We see the long narrow rowboats of the Vienna rowing club, each crew marked by different sweaters. There are long bathing beaches where men, women, and children are enjoying themselves. We see a dredging boat at work, for the channel must always be kept at a certain depth. Then we approach the great locks topped by two mighty iron lions. These locks lead to the great Danube Canal which cuts across the city and along whose channel are the commercial quays of Vienna. Before the great warehouses, with their numerous cranes and pulleys, lie steamers and barges from all the states bordering the Danube.

Yonder on the left side of the Danube is quite a different scene. There is no noise or bustle on that low shore. Behind the meadows and thickets of willow there is a long

dam. It is the flood dike which protects the villages and fields of the Danube plain in time of high water.

FIG. 1. The famous Iron Gate. This gorge is between a part of Jugoslavia and Rumania and is 85 miles long. It has been cut by the Danube through the mountains where the southern Carpathians meet the Balkan Range. In the river, above the Iron Gate, were formerly many rocks and rapids which made the passage most dangerous.

Long after passing Vienna, we reach the thriving city of Bratislava, or Pressburg, the ancient capital of Hungary.

It is now the chief Danube port of Czechoslovakia and the main commercial center of the rich region of the Little Hungarian Plain.

The traffic on the river increases. Great Danube boats are going up and down the stream, for we are passing Budapest, the most active port of the Middle Danube. The river now flows across two hundred thirty miles of the Hungarian plain. Here it is a wide and sluggish stream. It fills up an old channel only to form one sometimes several miles away. Great marshes follow its bank for miles. The calls of the water birds are heard from the high reeds. We pass the Franz Joseph Canal, which connects the Danube with its main tributary, the Tisza. We pass the "corn crib" of Europe, which lies on both sides of the river as we travel through the southern part of the Hungarian plain.

Look at your map and find the place where the southern end of the Carpathian Mountains joins the Balkan Range. Here we leave behind the wide lowlands of the Hungarian plains. We enter a beautiful hill country where the narrow river carries us rapidly on our way. The scenery changes constantly. In some places rocky cliffs rise several hundred feet above us. Now we look out on bare white limestone and dark slate; then we travel between forested hilltops. As small rapids appear and we get farther into the great mountain gorge, we wonder if it will be possible to go through safely.

This great gorge through the mountains is the famous Iron Gate of the Danube. Its narrowest place is the gloomy Kazan Pass, sometimes called the Cauldron. Here the river is narrowed down to one-tenth of its width above. It rushes along at a terrific speed, digging out its bed as it goes.

Our boat hurries on with the river, for modern skill has made it safe for boats to travel through the Iron Gate.

The gigantic rocks which formerly lay in the river bed have been blasted out. The rocky shores have also been dynamited. The ship channel is now carefully marked by red logs which are securely anchored in the stream.

FIG. 158. Floating, or ship mills on the Danube River. These mills are found on many parts of the Danube. The axles of the great water wheels rest upon the anchored pontoons. The current turns the water wheels and they turn the machinery in a mill, either on shore or on the pontoons.

Ships and signal stations are so situated as to aid in guiding the boats. In spite of all of these aids, our boat must drop anchor at nightfall and is not allowed to proceed until daylight. One sees a great many other boats lying in the channel, boats going from the Hungarian plain to the east, and Greek and Rumanian boats carrying goods westward.

After going through this narrow pass, we reach the open

plain of Rumania. Glimpses of the Orient lie in front of us. We pass floating flour mills with their machinery kept in motion by the current. On shore we see Turkish women, veiled to their eyes, going to the well. The Mohammedans with their water pipes, or nargilehs, are squatting and smoking contentedly in the streets, reminding us of the days when Turkey ruled from Constantinople to the region north of the Danube.

Soon the first real settlement in western Rumania appears. Neat modern houses, wharves, and storage places for grain, tobacco, and fruit, lie along the water front. But the old and interesting Danube city lies behind these modern improvements. Many Rumanians appear and we observe their long-sleeved coarse linen shirts, short dark jackets that are generally worn open, snugly fitting trousers of white wool that are covered by spiral leggings below the knees, and fuzzy sheepskin coats.

As this interesting place is left behind, the ship passes the ruins of a mighty Roman bridge. Then we see flocks of cranes standing on sandbanks watching for prey. Wherever the steamer stops there are fishermen with strings of sturgeon, the favorite fish of these regions. These fishermen supply Rumania with large quantities of fish. Bucharest, the capital, alone consumes a million pounds each year, for many of its citizens observe the church fast days most conscientiously.

We are on the Danube between Rumania and Bulgaria now. On the left side we see only small houses of the customs guards or lonely landing places. There the land is low and frequently flooded, and the settlements are situated at a considerable distance from the river. The right bank is formed by the Bulgarian plateau. Wherever narrow valleys lead to the river, Bulgarian villages are seen. Their wooden houses, built in Turkish style, remind us again of Turkish times. Sometimes there seem to be

more minarets than churches, suggesting that there are more Mohammedans than Christians.

Lower down the river the traffic increases and signal boats guide the ships through the deep part of the channel.

FIG. 159. On the Bulgarian shore of the Danube River. The river here flows between Rumania and Bulgaria. Behind the northern bank is a flat plain. Its southern bank is formed by the Bulgarian plateau. In the foreground of the picture you can see a landing place.

Small but strong screw steamers are seen, generally flying the blue and white flag of Greece. Large iron sea-going boats freighted with tons of grain, wool, or petroleum are towed along. From the officer's bridge on the signal boats the direction of passing is signaled, for, though the river is more than a mile in width and twenty to sixty feet deep,

there are many shallow places. Many beautiful sailboats with stretched sails add to the variety of the scene.

As we continue down the Danube River we pass one picturesque town after another. We see Turkish houses, slender minarets, Byzantine churches with rounded domes, and ruined fortifications. Finally we reach Ruschuk, the most important commercial city of the lower course of the Danube. For the first time in our trip on the Lower Danube, factory chimneys are added to the scene. At this Bulgarian port many travelers leave the boat and take the train for Constantinople or for Varna, Bulgaria's main port on the Black Sea.

Across the river from Ruschuk is the Rumanian port, Giurgiu, where people disembark to go to Bucharest, forty miles away. The docks are filled with bales of raw cowhides and hundreds of boxes of eggs. Corn, wheat, tobacco, and entire herds of sheep are loaded onto the boats. The new portion of the town bustles with activity, but the old Turkish quarter with its air of neglect is the more fascinating to the traveler. One-fifth of all the city's population is Turkish. Modest and retiring, the Turks are occupied chiefly with the small trades of their ancestors, such as leather and metal work. The Armenians, Greeks, and Jews whom we see around the docks play an important part in commerce.

As the river makes a turn toward the north it has reached a width of one and a half miles. The water is yellow from the loam of the Rumanian plain. Low islands, marshes, and stagnant waters abound. Great flocks of wild ducks pass overhead. The cormorants, cranes, storks, and pelicans fly about or preen themselves on the quiet sandbanks.

As we move on down the river, the first bridge on the Lower Danube appears in the distance. This bridge at Cernavoda is three-fifths of a mile long and is suspended

more than a hundred feet above the water. On its tracks, the railroad train from Bucharest carries freight to the port of Constantsa. It is also traversed by the great pipe line which carries petroleum from the edge of the Carpathian Mountains to the tankers in the harbor.

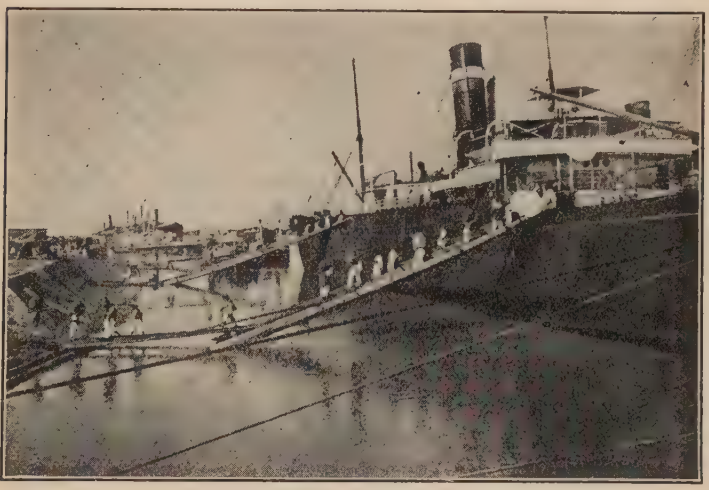


FIG. 160. Rumania. The port of Braila. The great steamers which you see are ocean vessels. The stevedores are loading the boat with some of Rumania's surplus wheat. Why does the steamer anchor so far out in the channel?

As our boat moves downstream, we see the river growing broader and broader until it is ten miles wide. Great monotonous marshes stretch for miles downstream. Higher land is visible only in the distance. Willow and poplar forests, reeds, sandbanks, water birds, and sometimes fishermen's boats are all we see.

Then the river narrows down. We reach the port of Braila and farther on the great port of Galatz. Although Galatz is more than 100 miles from the sea it is a large

seaport. Steamers from Greece, London, and Marseille lie along the docks in long rows. Powerful derricks lift boxes, barrels, bags, and bales. Here grain is pumped like water from the towering elevators into the ships, while elsewhere it is still transported in the old way on the backs of Rumanian coolies. There are wide streets, houses of three or more stories, coffee houses, electric street cars, electric lights, wharves, arsenals, docks, and all that goes with a city of 75,000 inhabitants.

Here sea shipping really begins. We no longer see the easy-going side-wheelers of the River Navigation Company. Instead, large screw-propelled steamers take their place. They are starting on a trip through the Black Sea or perhaps the Mediterranean. The river here divides into several streams to cross its delta, but the ships go slowly down the Sulina Channel. On both sides lie a thousand square miles of monotonous delta. Rushes, birds, fish, and mosquitoes are all we see.

Again a city appears, Sulina, with its elevators, derricks, chimneys, and masts. Asiatics and Europeans, soldiers and sailors crowd the quays and watch the floating derricks as they pump thousands of tons of grain from many lighters into the holds of ships. Here the white caps of the dark sea waves rush over the sea walls at the river mouth. White sea gulls are calling. The lighthouses mark the end of the jetties. We have reached the Black Sea!

Chapter XI

HUNGARY

On the continent of Europe, there is an interesting valley almost completely surrounded by highlands. The Carpathians and the Alps, with their several outlying ranges, form the great rim of this favored valley. Within this mountain rampart lies the great Hungarian plain. In the western part, an outlying ridge of the Alps divides the plain into two very unequal parts. East of the ridge lies the larger basin, which is called the Great Alföld; to the west, around Bratislava, lies the small basin, the Little Alföld.

The Danube River is the main artery for both of these basins. After draining the smaller basin, the Danube enters the Great Alföld, the heart of Hungary. Then making a sharp turn to the right it flows southward across the Great Alföld. To the east, its main tributary, the Tisza River, also flows southward. These two great parallel rivers continue southward for many miles. After entering Jugoslavia the Tisza joins the Danube. There, too, the Drava and the Sava, two great rivers from the west, pour their waters into the Danube.

These four great rivers meander very slowly over the plain. Along their sluggish courses, especially in the southern part of the plain, there are many marshes. These are many miles wide, and in the spring they are frequently flooded. Consequently, few cities are located along the banks of these rivers and few bridges have been built across them.

Before the World War, Hungary included all of the Hungarian plain. As a result of the war she lost most

of her mountain frontiers and a large part of her plain. Czechoslovakia, Rumania, Jugoslavia, and Austria have been enriched at her expense. Her territory has been reduced to about one-third its former area. In losing her mountain frontiers, Hungary lost most of her great forests; she lost almost all of her minerals; the upper courses of her streams, where water power is available; and she lost

FIG. 161. Hungary. Haymaking near the Austrian border. The white, long-horned ox is a common domestic animal in Hungary.

large grazing lands. She also lost the rich southern portion of her plain. This southern area is one of the richest agricultural regions of the world, and is called the "Corn Belt of Europe." Jugoslavia and Rumania now own a large part of it, and Hungary produces only one-fifth of her pre-war crop of corn.

This diminished Hungary is still a land well worth visiting. Prosperity is not lacking, and the people will hold your interest and admiration.

Our visit to Hungary may well begin at Budapest, which can be reached in a few hours by train from Vienna or by boat on the Danube. We will postpone our visit to the city until we have met the people in their country homes. Let us take our first excursion to the southwest, where Lake Balaton lies in the midst of rolling hills. In

Courtesy Hungarian Consul, N. Y.

FIG. 162. Hungary. View along the shore of Lake Balaton, which is surrounded by a rich agricultural region. Its surplus products are sent to Budapest. Notice the grapevines and fruit trees in the foreground. The Romans also raised grapes here.

this region we shall see many old vineyards, for it is a well-known wine-producing district. There are also rich cultivated fields of corn and other cereals. This part of Hungary has an older civilization than the eastern part. There we find old cities, ruined castles, and deserted monasteries which have played an important part in the history of Hungary.

The greatest interest for us in Hungary lies toward the east. Let us make a second start from Budapest and

take a circular tour through the Great Alföld. It is summer time, and you must be prepared for hot sunshine in Hungary. Our train carries us over the open plain toward our destination, a small village in the northeast. From the car windows, we see a rich farming land, which reminds us of the rich and fertile plains of Iowa. We pass fields where wheat has been cut and see the grain standing in stacks waiting to be threshed. There are fields where rye, oats, and barley have been grown, and there are tracts of standing corn. Before the World War, Hungary was called the granary of Europe, and Budapest had so many flour mills that it was called "The Minneapolis of Hungary." The present Hungary produces only half as much rye and only one-fourth the amount of wheat, oats, and barley.

The train stops at many small villages Here, as in the other parts of Hungary, you hear a language which is very unfamiliar to most of you. It is not at all like the Romance languages which are based upon the Latin. Neither is it like the group of Teutonic languages. There are only two other groups of people mentioned in this book whose languages are related to the Hungarian, and those are the Finns and the Turks. You read two signs at the railway station, "bimenet" and "kimenet." You wonder what they mean. Finally you notice that many of the people are leaving beside one sign and many others are coming in under the other sign, and so you know that the words mean "entrance" and "exit." You see a lady nodding her head and saying "egen, egen" which means "yes, yes." A child shakes its head and says "nem," and you know she is saying "no." You hear only one word which sounds familiar. A young girl goes past your car window with a basket of sweets, and she is calling her wares in a word very much like "chocolate."

Our destination is Mesökövesd, a little village in northern

Hungary where some of the quaint peasant costumes are still worn. There is no hotel in the village, but one of the families living there will be very glad to keep you over night. One old tale tells of an aristocrat who was so anxious to have guests constantly with him that he paid inn-keepers for each guest they brought to his home. Even though the guests were in a hurry, he forced them to stay with him three days, and every day he kept a free table for from eighty to one hundred guests. Another sociable gentleman is supposed to have hidden a wagon wheel from the cart of each passing caller until a real visit had been made. These stories are supposed to be typical of Hungarian hospitality.

We have timed our visit to Mesökövesd so as to be there on a church festival day. Then most of the peasants are out in the gay costumes which are shown in some of the pictures. Just before church time, you see many going toward the village church. The long accordion-plaited skirts of the women, the young girls, and even of the very little girls are kicked out behind at every step. You could never guess how these skirts are plaited. To understand that you will need to know something about the peasants' homes. In each of those homes there is a large circular stove, larger around the bottom and narrowing into a chimney. It is built of clay bricks and is in the "best room" of the house, extending from the floor to the ceiling. The opening into this stove is not from the "best room" but from the hall or kitchen. This arrangement saves the "best room" from the dirt of fuel and ashes. The peasants' bread is baked in this stove or oven. As a rule, the loaves are very much larger than any you have seen, and many loaves are baked at one time. But what has this to do with plaited skirts? When the mother is going to bake a batch of bread, the daughter gets ready to plait her skirt. She lays all the plaits very carefully and bastes

them in place. Then she lays a clean cloth over her material. When the many large loaves of hot bread are taken from the oven, they are carefully laid on top of the skirt to be plaited. By the time the bread is cooled the plaits are made.

Courtesy Myrtes E. Clark

FIG. 163. Hungary. Native costumes worn on church holidays in a village of northern Hungary. The bright-colored embroideries are hand-made.

Only the peasants in Mesökövesd wear these costumes. The middle class, the families of the doctors, teachers, and tradesmen, wear clothes like yours. In a few other parts of Hungary there are other pretty peasant costumes, very many of which are being discarded.

If you were astir very early in the morning at Mesökövesd you would see the village cowherd driving all the village

cows to pasture. Possibly he has a cow of his own. His neighbor's cow is driven through the gate, out into the village street. One after another, cows join the procession. The cowherd takes them to the pasture and there he watches them all day long. At sunset he brings them back to the village. In the winter, these cows stand in their stables, for then Hungary is wrapped in snow and ice.

Northeast of Mesökövesd, we shall visit the village of Tokay. It lies on the Tisza River, in the foothills of the Carpathian Mountains. Tokay is in the region which produces Hungary's most famous wine, which has been called "the wine of kings and king of wines." At one time the vintage of Tokay belonged to the king of Hungary.

You can stand on a hill and see almost the entire wine region of Tokay. The vines grow on the rich volcanic soil of the southward facing slopes. Those slopes facing the sun are warmer than the plain, and there the grapevines flourish best. Some of the grapes of the Tokay vine are not gathered in early autumn, as other grapes are. They are left on the vine until after the first frosty days of snow, when many of them have become wrinkled and dry. Then from the dry berries is made a thick, sweet, strong essence which is used as medicine. This is the most valuable Tokay. Both dry and juicy grapes are used to make the second quality, which is the famous Tokay wine. On the vintage day everyone wants to help and everyone works as hard as he can. Food is served in the open. The gypsies furnish music, and a day of hard work is turned into a day of festivity.

If you wander through the steep streets of Tokay you will notice that many wine cellars have been dug in the sides of hills. Some of these cellars are separate from the houses; others are built underneath the homes. In some places one cellar is under another. The wine is made and stored in large casks in the cellars. The oldest wine

is generally stored in the lowest cellars and is the most valuable. Most of these cellars are carefully locked. The stock of wine in some of them is considered so valuable that only one person is permitted to have the key.

At Tokay we shall take the train southward. The train crosses the Tisza River on a modern railroad bridge. We travel in the midst of fertile farms. We see grain fields

Courtesy Hungarian Consul

FIG. 164. Hungary. A farmyard scene, showing the pusyta well which is very common. Notice how the women carry water.

and vineyards, acres of sugar beets, and miles of sunflowers. In a few hours we reach the city of Debreczen, near the eastern boundary of Hungary. This city, like some of our cities which are situated in the midst of rich agricultural sections, is much like a very large village. We may call it a "village city" or a "market city." Budapest is the only "real city" in Hungary. The other large cities are all market cities. They are centers for selling agricultural products and for buying the necessities for

the farms and the households. Only to a very small degree have they become centers for factories.

At Debreczen you can stay at a large modern hotel and you can travel around the town on street cars. You could also hire an automobile. But many of the Hungarian people use horses and carriage and you decide to go that way. You remember that the ancestors of these people were good horsemen. Hungary is still noted for its horses. They are small, but beautiful and well cared for. As you ride around town behind the spirited horses, you decide that it is an excellent way to go. You pass churches, schools, and a medical college, besides many places of business. On the outskirts of the city you go through a beautiful wooded tract and beyond that you come to the agricultural college. There the students are trained in scientific farming.

Once all the land of the Hungarian plain, or the pusyta as they call it, belonged to the different cities and villages as common property. Now the greater part is divided into farms. Some of the cities still own large tracts of land. Debreczen is one of these, having 300 square miles of open treeless plain, called the Hortobagy.

Would you like to take a trip out to the Hortobagy? Although it is only about thirty miles from Debreczen, we will take a train, as the country roads are very poor. After leaving the city, we travel between cultivated fields. You see large estates belonging to the rich, for most of the land in Hungary is held in large estates. You are told that a law has been passed to make each large landholder sell one-fifth of his land. Men representing the government take that part of his land, divide it into small tracts, and sell them to the peasants. You pass through a region in which the land has been subdivided. Near the village you see many small stacks of grain which has not yet been threshed. You wonder why the stacks are so small. Each

peasant on one of these small tracts of land has harvested his grain and hauled it to the outskirts of the village. There each one has stacked his own grain in a separate stack. As soon as the threshing machine has finished

Courtesy Myrtes E. Clark

FIG. 165. Hungary. On the Hortobagy. These wells are seen throughout the plain, even in the villages. They are the most striking objects on the Hungarian landscape.

at a neighboring village, it will come to this village and thresh each peasant's grain.

Beyond the cultivated fields you come to the Hortobagy. You are in the midst of grazing land. The manager of the Hortobagy has a pretty span of horses and a carriage that he uses to go about. Possibly he will take you with him. He starts off over the flat plain, following an uncertain road. Only scant grass grows on either side. Soon you come to

a typical pusyta well, such as you see in several of the pictures. Its long arm stands out clearly against the sky. A short distance away you see a herd of horses, and the herder, on horseback, seems to be driving them toward

© *Ewing Galloway*

FIG. 166. Hungary. A sheep herder on the Hortobagy. Notice his hut, his dress, his way of preparing his meal, his dog, and his embroidered coat behind the dog.

the well. He reaches the shallow well, lets the bucket down, with little effort makes the long arm swing upward with the bucket, and then empties the water into the trough. The thirsty horses drink and then are away to graze again.

You drive farther over the plain. You see other herds of horses and many flocks of sheep. There are many herds of cattle, too. Each flock or herd is tended by a

cowboy. Some of these cowboys are young men, others are sixty years old, but all seem to enjoy their work. You see many of the pusyta wells, for in the Hungarian plain the water is only a few feet below the surface. And what are those white specks in the distance! Those are flocks of geese, for one sees many geese in the Hortobagy

Photo by author

FIG. 167. Hungary. A flock of geese on the Hortobagy. The superintendent of the district is seen in the background, and his home is at the right. What uses are made of the feathers obtained from the many geese of Central Europe?

as well as in the other rural districts and in the villages of Hungary.

We reach a simple hut, the home of several cowboys. It is made of reeds and forms only a rude shelter from the storms. A smaller reed enclosure serves as a fireplace where dry dung is the only fuel. Here the cowboys have only the earth floor for a bed and their cloaks for cover. There are no stables; wooden corrals form the only protection for the animals in time of storm. Some of the cowboys and shepherds are having their midday meal, sitting around a circular table. In the center of the table is a hole which contains a bowl of soup for all. This soup,

with bread, is the simple meal which one of their own comrades has prepared.

In winter the plain is lonely and cold and often covered with masses of snow blown into great drifts. Then the herders doze around the camp fire, wrapped in the sheepskin capes which hang down to their ankles. Sometimes they visit the little inns which are found scattered over

Courtesy Hungarian Consul

FIG. 168. Hungary. A shepherd and his flock on the great plain of Hungary.

the plain. Some of these inns are kept by gypsies and all of them are places of sociability.

You will be surprised to know that there are fish ponds on a part of the Hortobagy. The water from the river is diverted into low areas and there the city of Debreczen has made ponds for the fish. The ponds are bordered by tall reeds, and these are used to make the simple shelters of the care-takers and of some of the cowboys. You see a man rowing a boat about one of the ponds. He is scattering food for the fish, for there is not enough natural food for them. Large numbers of fish are caught in these

ponds and shipped alive in tanks of water to Debreczen and other cities.

At noon you may stop at a small country inn on the Hortobagy. There the host serves you with an excellent dinner of fried chicken. But there is one dish which surprises you and which is a typical Hungarian dish. You are served a cured cucumber eight or nine inches long. It looks deliciously cool. But can you eat it all? You think not. You cut off one bite and try it. Before you know it you have eaten the whole cucumber. If you ask how these cucumbers are prepared, you are told that they are fermented with bread dough.

Returning to Debreczen, we continue our travels toward the southwest. Most of the way we are in the midst of farm lands. We pass through a few wooded areas and over a few alkaline plains. The farther south we go, the fewer are the fields of rye and barley and the more numerous are the fields of corn and wheat, for the land along the Tisza River is very rich land.

The Hungarians call the Tisza the goddess of the land. As the Germans sing of the Rhine and the Russians of the Volga, so the Hungarians love the Tisza. All good is credited to her and many are the songs which are sung in her praise. And it is little wonder, for along the banks of this yellow, slow stream we find the richest of all the fertile land of the great Hungarian plain. This black earth is the mother of Hungarian wealth. For miles and miles there are fields of wheat from which Europe's finest flour is made, for Hungarian flour has long been the standard flour of Europe. There are great fields of corn which help to fatten the many head of swine. There are fields of sugar beets, and others of tobacco. What is that which the Hungarian gentleman has in his hand? It is long and thin like a pencil and it is called a "Virginia." This is the typical Hungarian cigar. Do you know why it is called a Virginia?

Photo by author

FIG. 169. Hungary. A farm scene near the Hortobagy. Notice the kind of oxen and wagon used.

The Tisza River is not always a blessing. When the snow melts, the waters of the river rise. The Danube, too, is swollen by melting snow, and its greater volume and velocity hold back the Tisza River. Floods have always ravaged the shores of the Tisza, though modern engineering skill has regulated the river in many places.

Because the lower course of the Tisza is bordered by marshes, no railroads cross it south of the city of Szeged. Neither is there a bridge for many miles north of that city. But it is possible to cross the river at many places on ferries. The roads lead to the bank of the river. There carts, cattle, horses, hogs, and people are all crowded on to ferries and taken to the opposite shore.

As we continue our return trip to Budapest, we shall cross the Tisza on the bridge at Szeged, a large market town very much like Debreczen. It will be well to stop there for a time to have a drive about the surrounding country. The drive takes us past rich farming land. We see many fat swine, descendants of the wild long-legged hogs of early days, whose scant fare was roots and acorns. There are also cattle, horses, and sheep. Do you think that one of these families of Magyars will keep us overnight? We must not travel after dark. There are so many, many roads crossing the plain that we might lose our way. The houses which we pass look very neat and inviting. We stop before a house built of clay with wood and reed. The outside is white-washed, and around the lower edge there is a border of light blue. The people invite us to enter the main house, for a Hungarian house is sometimes three houses. Inside is a typical Hungarian stove. It is filled with straw ready for firing, for wood is scarce and seldom used. In the corner opposite the stove is the family table and next to the wall are two beds with heaps of soft pillows. We wish we might take that tulip-painted trunk home! And those tulip-painted plates

and cups on the wall, how cheery they make the room seem!

Soon we are ushered into the second house, where the hospitable housewife serves us a supper. We are very tired, and soon after supper we are given full possession of a third, or little house, for the grown-up children are away from home and we are to sleep in their beds.

In the morning we go out into the quadrangular court-yard where the housewife is drawing water from the typical pusyta well. She fills her pails and hooks them to the chains dangling from the wooden yoke which rests upon her shoulders. She reminds us of the women in Palestine thousands of years ago. The animals are fed and watered and we are invited to a warm breakfast. How hospitable these Hungarians are!

Boarding the train again at Szeged, we reach Budapest in a short time and so complete our trip around the Great Alföld. Then, after a night's rest, we may become better acquainted with Budapest, the capital of Hungary. The city is counted one of the most beautiful in Europe. It is an interesting twin city, the two parts of which existed for centuries as separate cities. The right bank of the Danube at this point is steep and rocky, and Buda lies on the top of the cliffs and clings to the slope facing the river. The left bank, in contrast, is low and level, and Pest spreads over a large area of this flat land. Between Buda and Pest flows the Danube, so broad that you may find it convenient to cross by a small steamer instead of using one of the six long modern bridges.

Budapest is not only the capital and political center of Hungary. It is also the commercial and industrial center. All the railroads radiate from Budapest and collect the products of the land to be shipped either on the large Danube boats or by the railroads which connect Budapest with the neighboring countries.

Budapest is situated on the Danube River where the valley formed the early pathway connecting the great plain with the smaller Hungarian plain and with the rich regions of Bohemia and Germany beyond. Look at your map and note that this was the only possible gateway opening in this direction. This explains why the Romans chose the site of Buda for their town and fortress. Traffic

Courtesy Hungarian Consul

FIG. 170. Hungary. Looking across the Danube at Budapest. The Ministry of Agriculture on the right, and the Parliament building on the left.

has followed the Danube valley for hundreds of years and is still following that route. From all the east, raw products meet at Budapest and pour westward to Vienna and beyond. Manufactured goods follow the same course back to the east through Budapest.

This Hungary with new boundary lines established after the World War has many problems to face. She has a new form of government and many of her people are dis-

satisfied with it. She has great agricultural resources, but she has lost her natural frontiers, most of her large forests, her coast line, most of her coal and other minerals, and most of her water power. You will be interested to watch and see how successful she may be in spite of her losses.

Chapter XII

SOUTHERN SLAV COUNTRIES

Jugoslavia

Jugoslavia is another of the new states of Europe. Its name means "southern Slavs." You have read of the three Slav nations, Russia, Poland, and Czechoslovakia. Jugoslavia is another Slav kingdom, separated from the Slav nations at the north by the Germans of Austria and the Magyars of Hungary.

Jugoslavia is made up of many different parts. Serbia is the most important part. Montenegro, which lies west of Serbia, united with it. In addition, the Slavic people living in the southern portions of the former Austria and the old Hungary united with Serbia. A new nation was thus formed and the royal family of Serbia became the reigning family in Jugoslavia.

Serbia's union with these other Slav regions secured for her that which she has long desired. Having been always an inland country, she has for years wished for a seacoast. Her eyes have always been turned longingly toward the Adriatic and toward the Ægean. She now has the much coveted Adriatic coast line. When the harbors and railroads have been developed, she can ship her surplus products to foreign markets through her own ports.

This is not the first time in history that the greater part of this land has been under the same government. In the days of the Roman Empire, a large part of this domain was called Illyria and was under the Roman rule. In the

Middle Ages, Venice ruled along all the shores of the Adriatic. Later, in the seventeenth century, the Turks were masters of the Balkan Peninsula and their influence reached to the shores of the Adriatic. Roman, Italian, and Turk have each left their mark in this new kingdom of the Slav.

These southern Slavs may be divided into two branches, the Slovenes in the west and the Serbians who occupy a far greater territory. The Serbians are again divided into two groups according to their religion,—the Serbs and the Croats. The Serbs, like the Russians and the Bulgarians, use the Slav alphabet which is based on the Greek alphabet. They belong to the Greek Church. The Croats use the Roman alphabet and are followers of the Roman Catholic Church. Although the languages of the Serbs and Croats look entirely different in print, they sound the same when spoken. To know Jugoslavia well, one must know the Slovenes, the Croats, and the Serbs. But one must also know the Turks, Italians, Montenegrins, Greeks, Armenians, Germans, and Hungarians, for all of these people are living there side by side.

The country is just as varied as the people. There are rugged mountains, rolling hills, and level plains. There are stony deserts, forested hillsides, stagnant marshes, and fertile farms.

Approaching the Adriatic coast from the sea, we see rugged hills of limestone bleached almost white. Beyond rise the higher mountains. The hills and mountains come so near the sea that in some parts there is no place for man; in other parts there are very narrow strips of fertile land protected by the mountains from the cold winter winds and watered by the springs which come from crevices in the limestone rock. These small strips of fertile and well-watered land have always been the spots where people have lived.

This region along the Adriatic is much like the Riviera of which you have read. It, too, has the Mediterranean climate, winter rains and summer drought. So you are not surprised to find the grapevine, olive, and fig trees. You are interested in the vineyards, for they are frequently made to produce two crops each year. In the late winter or spring, you see rows of beans or lentils between the vines. These thrive on the winter rains and are harvested before the summer drought. During the drought, the roots of the grapevines can get enough water to ripen the grapes, but the short-rooted beans could not grow at that time.

FIG. 171. Jugoslavia. Peasant women with open, sleeveless cloaks, in southern Dalmatia. The woman at the right carries the customary bag and string of cakes.

Along the coast one sees ruins of castles and monasteries which speak of the more prosperous days when Venice ruled over the Adriatic. In the little seaside towns the fishermen are seen sorting their sponges and coral. Others are returning with their catch of sardines and tunny fish.

The country furnishes nothing but stone for the houses. These houses, covered with green ivy, are interesting and picturesque. On the ground floor the peasants have their stables and storerooms. Their living rooms on the second

FIG. 272. Jugoslavia. A very common kind of house in Dalmatia. Why are these houses built of stone?

floor are reached by an arched stairway on the outside. Even the roof is made of thin plates of limestone.

We may go from the sea to the mountains by way of Spalato or through the forests of olive and cypress at Ragusa. Both ways lead to a stony desert.

Certainly, upon first view one sees nothing but a desolate waste of limestone. Its whiteness is interrupted only by the shadows of the clouds which pass over the sky. But finally the eye discovers green spots here and there. These are the only fortune of the people living in this forgotten corner of the world, for here their sheep and goats find their scant food. This is part of the Dinaric Alps. There is no water to be found on the surface, for as it rains the little streams disappear underground into large caverns. Sometimes the underground rivers reappear lower down in waterfalls, in springs along the shore, or even in springs which force their water out at the bottom of the sea. But the plateau itself is dry. The weather has crumbled the surface rocks. Heavy rains and wind carry away the soil as rapidly as it is formed. Sometimes the people save small patches of ground from the strong wind by covering it with stones. Only occasionally does an oasis appear in this stony desert.

Life has been hard for many of the people in the Balkans, but especially for the Montenegrins and others living in the midst of the stony desert. Their soil gives them only a bare existence. The women, clothed almost in rags, spend all their time cultivating the tiny patches of ground and working in the houses and in the market places. The men have always given much of their time to fighting. The many newly-made graves which are to be found along the frontier lines tell their own sad tales. Montenegro has always been considered the bravest country of all the Balkans, because she has for so many centuries resisted the Turks.

The western slope of the mountains is short and steep, but the northeastern slope is long and gentle. Beautiful forests of pine and fir begin at the edge of the stony desert. The tree-covered mountains are seen as far as eye can reach. Large meadows are found in the valleys. Springs are numerous, and the rivers become large enough to carry rafts. Wood is now abundant and the stone houses are replaced by wooden dwellings. The four-sided shingled roofs and the wooden fences overgrown with vines are a pleasant change. Half the land is covered with forests. We see great woods of beech and oak, and droves of hogs feeding on the beechnuts and acorns.

Fruit trees sometimes replace the forest trees. Here plums are a very important product. Before the war, Serbia ranked with California in the production of prunes. In the spring the plum orchards are a mass of blossoms. In the autumn they are the scenes of great activity. There are great piles of dark blue plums everywhere, and the air is filled with their delicious odor. The large drying ovens are filled with prunes. Out in the fields the plums are being cooked over an open fire, and are being made into delicious marmalade for export to western Europe. In the little huts, large kettles are filled with boiling jam. In near-by huts prune brandy is being made.

As we go northeastward toward the Sava River, the land grows flatter. We see great fields of corn, wheat, rye, oats, barley, sugar beets, grapes, tobacco, potatoes, flax, and hemp. The fields of grain are among the richest in the world. There is more corn than any other grain, for the peasants use it every day in their corn cake, and their many droves of hogs are corn fed. The fields and forests are separated by marshes along the river banks. There the reeds and water lilies are abundant, and on the edges of the marshes big black hogs are wallowing. If you wished to visit a family in this marshy section, you

would find it necessary to climb to a house supported on piles.

The various people in the different parts of this land live quite differently. In that part which is known as Serbia,

FIG. 173. Jugoslavia. These are typical houses in Bosnia. They have high shingled roofs and many verandas. Not all the villages have as beautiful a location as this one.

one still finds some of the people living in communities. According to this plan, all of the families which are related live in a group of cottages. They choose a house-father and a house-mother, who assign the tasks. In the center is the stone or brick house of the house-father. This contains the common kitchen, eating hall, and family hall

for the entire group. Around this are small wooden buildings which are used for sleeping quarters. A palisade extends around the buildings and pretty fruit trees brighten the yard. The people of the community till the soil and have all their property in common. This system is now being replaced by coöperative societies. These societies are particularly helpful in Serbia, because each family has too small a piece of land to be able to own modern machinery. To be sure, agriculture is still carried on in a very primitive way, and modern methods are only now being introduced

Many of the single houses in Serbia are tall quadrangular towers with the stable on the ground floor, the dwelling on the second, and a storeroom above. In the old days of blood feuds and quarrels with Turkish masters these houses were used for defense.

On the inside, these different types of houses are very much alike. A low fireplace is usually found on one side and a peculiar tile stove on the other. The oven is over the fireplace. The furniture is very simple. There is generally a low round table and the family sit around it, either on the floor or on three-legged wooden footstools. Benches, couches, and clothes chests are around the wall. Vessels of copper and clay, hand mills of stone, looms, and spinning wheels complete the furnishing. The stables always adjoin the house, as barns are unknown except near the cities.

The Mohammedan houses which are scattered through most of Jugoslavia differ from those of the Serbs. Their lower part is made of thick walls, faced with tiles. They have very small doors and windows and low ceilings. Here the family live in winter, protected from the cold. In the spring they move to the upper floor, which is made of wood and has many windows. Mohammedans are very fond of comfortable dwellings. As a consequence, one

sees in their dwellings richly carved furniture and inlaid work which remind one of the Orient. Carpets and pillows add to the comfort, and latticed windows shut the women's quarters away from the street.

The gay costumes of this new land are in great contrast to the dull furnishings of most of the homes. The longer the land was under Turkish rule, the brighter are the costumes. One can distinguish the different people of Jugoslavia by their headdress. The Croatians and Serbians of the plain wear a black felt hat or cap of lambskin. The men in the wooded section, especially the Mohammedans, wear a red fez or a turban, and sometimes both. The people along the shore, including the Montenegrins, have a round cap. There are as many costumes in the Balkans as there are kinds of people. To travel through the Balkans is like going through a museum in which many different nationalities are represented.

In spite of the differences in customs in the different parts, most of the people like the same amusements. They enjoy the kola, their native dance. In this they all form in a circle. Then to the tune of the flute or the bagpipe they take a step to the right, and then another step to the left. Sometimes the step is quick and sometimes slow, and the change in time adds zest to the dance.

Another favorite dance is the ring dance, in which the partners face each other and the couples stand in the form of a circle. On certain beats of the music, the men fire off their revolvers. Only the women of a warlike race would like such a dance! While some dance, others play the gusla, a one-stringed violin, making it cry or sing.

Taken as a whole, Jugoslavia is rich in natural resources. Her farming land produces food for her own people and a large surplus for export. The raising of live stock is important. Sheep are raised in the largest numbers. Cattle and swine are next in number. Although goats rank only

fourth, more than one and a half million goats feed on the barren lands which will not support other live stock. The agricultural industries furnish the main exports from Jugoslavia. Large numbers of cattle, sheep, and swine are

FIG. 174. Jugoslavia. At Agram in Croatia. Here you see the summer costume of the Croatians, and wares for sale in a large bazaar or market place.

exported, as well as meat products from Beograd (Belgrade) and other places. Corn, wheat, and other cereals are also very important articles of export. Tobacco, wines, distilled liquors, and fruit are also shipped out.

Jugoslavia has many minerals. Some of the mines were worked in Roman times, but many have not been developed even yet. There is some coal of rather poor

quality but not enough for the country's own use. So, like Italy across the way, she must import coal. Coal and other fuels are more necessary in Jugoslavia than in Italy, as the winters of the inland areas are very cold. There are many deposits of iron, although there is no large supply like the one in southern Austria. There are several copper mines, one of which, of excellent quality, is being worked by a French company. There are lead and silver mines, one of them being worked by the government. There are also gold, zinc, and manganese mines. At present Jugoslavia has little money to develop these mines. But all of these minerals represent wealth which can be developed in the future.

About one-half of Jugoslavia is covered with forests. These forests furnish winter fuel for many of the households. Many of the logs are cut into lumber at sawmills which are run by water power. Much of this lumber is exported through the port of Fiume. Fiume is the natural port for the Sava Valley, and much of the timber is floated to the Sava River from the regions at the south. Unfortunately there are few railroads or good roads in the country, so that some of the timber cannot be taken out at the present time.

Jugoslavia is an agricultural country and there is very little manufacturing. Those factories which are established use some of the raw products of the country. There are fifty large modern flour mills in Jugoslavia, which can grind one million tons of flour each year. A large part of this flour is exported. There are six up-to-date beet sugar factories and there is enough sugar manufactured for home use. There are also a few breweries and textile mills.

One of the most important and interesting industries in Jugoslavia is the carpet industry. This is centered at Pirot, a little town on the railroad near Nish. About three-fourths of the homes at Pirot have their own looms.

The men and women sit in front of their looms all day and weave carpets which are of beautiful design and much prized in other countries. The industry is also carried on in factories at Sarajevo and other towns.

Jugoslavia has enough resources to develop into one of the prosperous states of Europe. But she faces many problems. The people belong to many different nationalities. It is uncertain whether they will all be willing to coöperate. Then there is little money to develop the mines and the forests or to introduce new methods of farming throughout the country. Money will also be needed if she is to develop ports of her own. At present no railroad crosses the Dinaric Alps except back of Fiume. If this new country wishes to use her own ports she will need to build expensive railroads, and that, too, will require large sums of money. If Jugoslavia has peace and a wise government, she may be able to solve all of these difficulties and then she will be one of the prosperous countries of Europe.

RUMANIA

As one travels about Rumania today, one finds many reminders of the early Roman days. The proud inhabitants show you the ruins of Trajan's Road and also of Trajan's Wall. You find that many places of interest are named after him. And even the starry Milky Way is called the Road of Trajan. Out in the fields the slow-plodding, cream-colored oxen bear such famous Roman names as Cæsar and Cicero. The Rumanians are very proud of their Roman ancestry.

Rumania is a land with a small rich class and a large and poor peasant class. If one wishes to know Rumania, one must visit the peasant farmer in the midst of his sun-scorched fields of corn; one must watch the lumberman guide his raft on the rushing Carpathian rivers; one must

search out the shepherds of the steppes or of the mountain valleys; and one must sit in the village tavern where the farmer becomes chatty over plum brandy.

Let us examine this interesting land. The Carpathian Mountains extend through Rumania like the letter V with its point extending eastward. Inside the letter V is the rugged mountain region of Transylvania. The Rumanian plain slopes southward and eastward from the mountains and joins the great Russian plain.

A journey over the Rumanian plain takes one past large estates of wealthy landowners. We also pass the small farms of the peasants. On the large estates we see great fields of wheat, most of which is being raised for export. Here, too, we see many kinds of modern machinery. There are fields of corn, for corn meal mush is as common a food in Rumania as wheat bread is in our country. Barley, oats, and rye are produced in smaller quantities than either corn or wheat. There are many huts on each of these large estates. In these huts live the peasant laborers. Other peasants who work their own small tracts of land are hired to help on the large estates during the busy season. Some of the wealthy Rumanian farmers live on their farms, but many of them have homes in Bucharest.

More than one-half of the farm land of Rumania is divided into small peasant farms which average only eight acres in area. Here one sees slow oxen or water buffaloes dragging a dull plow. In the threshing season the peasants use the primitive flail of Roman days to thresh the grain. Most of the homes are very primitive. In other regions, the house is made by digging a hole in the ground and building a roof over it. While such houses are not very comfortable, they are cool in summer. In winter they protect the family against the icy northeast wind which sweeps over the plains.

FIG. 175. Rumania. A group of Magyars in Transylvania. The costume of the men is similar to that of the Rumanians. What kind of country is seen in this picture?

A great number of the Rumanian peasants cannot read and write, but they are well educated in different kinds of handwork. Many of the homes, especially in the

FIG. 176. Rumania. A village home. The houses are generally turned with the windowless side toward the street. The entrance is from the court. The roof is made of bundles of reeds. Many farmhouses resemble this one.

hills at the foot of the mountains, produce all the things they need. The women plant the flax and hemp. They harvest it, ret and break it, spin it into thread, and finally weave it into very fine or coarse cloth. Some of the women

raise a few silkworms. They tend them very carefully, often keeping them in the best part of the house. They watch them until the cocoons are spun. Then they unwind the fine silk fiber, unite the fibers into silk threads, and weave them into cloth. This precious piece of cloth is made into a holiday blouse for some member of the family. In the hills and mountains, the husband raises sheep which furnish wool. This, too, is cleaned, spun, and woven by the women into cloth for winter clothes.

One might think that these busy women would find no time to embroider the family clothes. But that is far from true. On festival days the women and girls are seen in beautifully embroidered blouses. And the men's costumes are not complete without gay embroidery. Their shirts are heavily embroidered, especially on the shoulders and sleeves. Their sheepskin vests, worn with the wool inside, are sometimes covered with embroidery on the outside. Even this does not end the Rumanian woman's work. She makes hand-woven rugs for her floor and strips of the same material to hang on the wall. The Rumanians have a saying, "The woman clothes the house." And this is really true, for after her work in the fields and vineyards is done, she begins to wash and comb the wool and to break the flax. In long winter evenings she goes to a "spinning bee," and her fingers fly rapidly in the midst of the gay chatter.

The men work in the field and tend the cattle and sheep. They also tan the leather and make leather sandals. Sometimes, during the cold winter, the men embroider their own gay-colored vests. They generally make the high sheepskin caps which are worn both summer and winter. Other members of the family work too. The little children tend the flocks of geese; the grandfather helps with the chores; and the grandmother's fingers seem never too old to go on with their spinning and weaving.

The designs of Rumanian embroidery are beautiful and artistic. At Easter time the people use some of the same designs in coloring Easter eggs. A design is drawn with hot wax on the egg. Then the egg is put into the dye. When it is taken from the dye, it is put into hot water,

FIG. 177. Rumania. A farmhouse of medium size in northern Moldavia. The walls are white-washed. The windows and doors of some farmhouses are painted in bright colors.

which melts the wax from the egg. It is then placed in dye of another color and the part which was formerly covered with wax is dyed. By taking off just a part of the wax at a time and putting the egg into several different dyes, a pattern of many colors can be made.

The Rumanians are not gardeners and generally look with scorn upon gardening. The raising of vegetables is left almost always to Bulgarians, who are excellent at that

work. They even call the vegetable gardens "bulgarii," which shows that the Bulgarians have been doing this work for many, many years. Some of the Bulgarians come to Rumania for the vegetable season and then return home for the winter.

Traveling on the plain, one sees the damson plum everywhere. The Rumanians are very fond of the brandy which is made from this plum. Apricots are also very common, and apples, pears, cherries, and peaches are grown.

In the plains of Rumania where the people depend upon their crops for their food, a crop failure means great suffering. Rumania is situated so far east that the prevailing winds bring only a moderate rainfall. When the country receives a normal amount of rain there is enough to raise crops, but when the rainfall is unusually light the crops fail.

There are few large cities in Rumania but villages serve as market places. The peasant drives his slow oxen to market. There he sits at a booth and sells his goods. Vegetables, fruits in season, poultry, bread, pottery, and many other useful articles are for sale. The women sit and knit or spin while their customers are deciding what to buy. Many Jews and gypsies are in charge of stalls, for many gypsies live in Rumania, often being the sole inhabitants of a village. In the evening the gypsies entertain with their music, and on Sunday afternoon they play for the village dance.

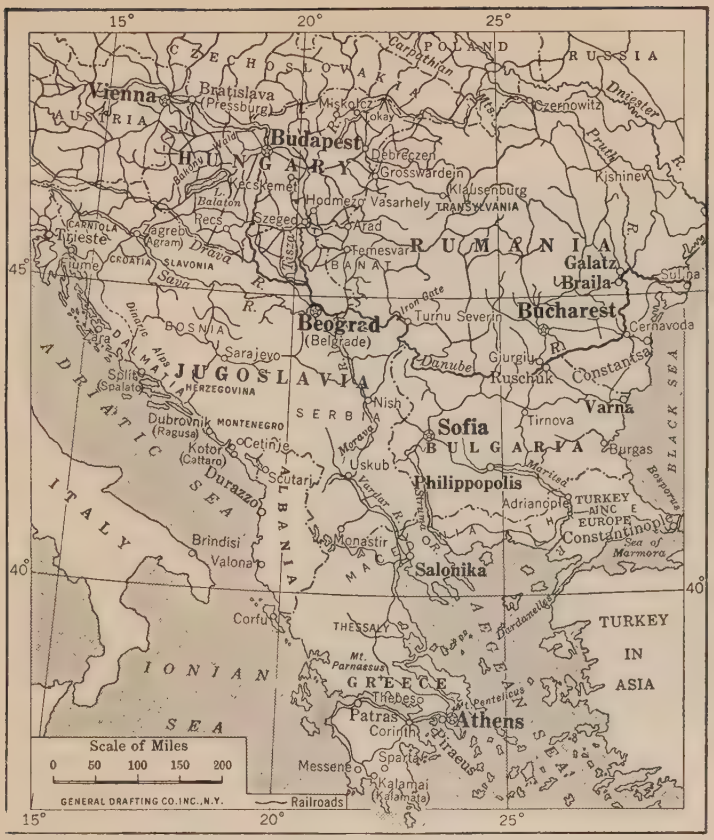
Many Rumanian shepherds live in the valleys of the Carpathian Mountains. Others drive their flocks from the plains up into the mountains for the summer. At the opening of spring, many of the owners separate the sheep which are giving milk from the other sheep. The sheep which are not milked are sent up into a mountain meadow in charge of a herder. On the way up they pass several

gypsy camps. Each night the herder sleeps beside his sheep; in the morning he continues his climb. Occasionally he hears wolves or foxes in the distance, and casts a glance at his wolf dogs to make sure they are watchful.

FIG. 178. Rumania. The market place of a small Rumanian town. Notice the head cloth and the curiously turned-up shoes.

As the herder climbs still higher he sees the footprint of a chamois or mountain goat.

The sheep which are to be milked are sent into another, richer, valley. These milch sheep are under the care of an old shepherd who knows all about the raising of sheep and the making of cheese. All summer he lives in his rude dairy hut. It is built of rough beams from the forest and is often no higher than the shepherd himself. In one



room the milch cheese are stored. The other room is both kitchen and bedroom for the herder. Often the milch sheep of several owners are placed under the care of one man who has a helper. The helper brings the sheep into the pen to be milked, for each must be milked three times a day. At the close of the summer, the head shepherd divides the cheese he has made, giving to the owners of the sheep in proportion to their number of sheep.

Many of the herders sleep out under the clear sky by the side of their sheep. During the daytime they wander over the grassy valley with their feeding flocks. One often hears the plaintive notes of their flutes in the distance. Sometimes the head shepherd calls on his long wooden horn to the distant herders. The quaint melodies of the horn reach among the mountain peaks. At his call the shepherds appear, looking like so many shaggy bears.

Fig. 179. Rumania. Shepherds with flutes from the Carpathian Mountains.

Many of the shepherds in the Carpathian Mountains still wear the native costume. It resembles that used in other parts of Rumania, but each region has its own peculiarities of dress. The shepherd often wears tight white woolen trousers, the legs of which are longer than his own. So the trousers lie in folds or wrinkles on his legs. His long shirt comes almost to the knees and is held in at the waistline by a woolen or leather girdle. This girdle serves as pocket for tobacco, pipes, and other articles. His vest is of sheepskin with the fur inside and the white skin on the outside. On his head is a shaggy sheepskin hat or one of black felt; on his feet he wears leather sandals. A long cloth cloak, or a heavy sheepskin, completes the picturesque costume on cold days.

Some of the women, also, are still seen in the native costume on Sunday. The prettiest part of their dress is the apron-like, richly embroidered cloth which is wound about the hips to form a kind of overskirt. Sometimes the women wear two carpet-like aprons, one in front and one behind. These resemble the aprons of some Bulgarian costumes.

The mountains are rich in forests as well as pasture land. Lumbering is one of the main industries of Rumania and lumber is one of the most important exports. On the lower slopes, one sees many oak, beech, elm, and ash trees. These are all trees which shed their leaves in the fall, or deciduous trees. Swine feed on the acorns and beechnuts. Above this belt of deciduous trees are the pines and firs. The logs cut from these forests are floated down the rivers to the sawmills. Much of the timber is exported by way of the Danube River, which carries a large part of Rumania's freight.

At the foot of the Carpathian Mountains there are large deposits of oil. Rumania is one of the important oil-producing countries of the world. In this same region one sees great salt mines similar to those in Poland. These products, and also the surplus from the farms, are exported to pay for the manufactured articles which are imported into the country.

Bucharest is the capital of Rumania. The name means "city of pleasure" and that is what the city seems to be. There is very little left in Bucharest to remind one of olden times; instead, it is a modern city. Its bright cafés, high-priced restaurants, and expensive hotels seem much more like western than like eastern Europe. In Bucharest one sees the royal residence, the larger of the two Rumanian universities, a museum, and a home for the blind which was established by the former Queen Elizabeth.

Bucharest is situated at the center of the Rumanian

plain and at the crossing of the main highways and railroads. A main railroad line runs from the port of Constantsa through Bucharest, Budapest, and Vienna, and on to the French coast. Do you wonder why the most important city of Rumania is not on the Danube River? There are two reasons. Rumania is an agricultural country and Bucharest is located at the center of the main agricultural region. Also, you have read that the northern shores of the Danube are low and often swampy. Therefore those shores are not a good site for a city. So this gay capital of a rich agricultural country stands at the center of the rich plain which has been coveted by so many different peoples in the past.

BULGARIA

The entire Balkan area is one of the most rugged sections of all Europe, and Bulgaria is no exception. The Balkan Mountains extend across Bulgaria from west to east. North of these mountains, a fertile plateau slopes gradually down to the edge of the Danube River. There are other mountains in southern Bulgaria, which rise higher and are more rugged than the Balkan Mountains. All the rest of Bulgaria consists of fertile valleys. It is an agricultural country and the home of a peasant race, intelligent, thrifty, and contented.

Bulgaria is not only a land of farms; it is a land of small farms, and each farmer works his own land. There are no large estates except those which belong to the monasteries, and very few people work for wages except in the towns. The average farm is only an eight-acre tract and thousands of farms are less than three acres. Sometimes one man owns several of these scattered tracts. By means of these farms the Bulgar lives an independent life, satisfying most of his own wants, and contented with very few comforts. There are few rich and fewer poor.

In traveling through Bulgaria, one finds that many peasants do not live on their small farms. A few live in small hamlets in which the buildings are more or less scattered. Most of them live in villages of several thousand inhabitants.

Many of the homes seem strange to us. In the Danube region one occasionally sees ancient earth huts of which only the straw or reed roof is above the ground. In other parts one sees framework houses with heavy roofs of hollow tile. As a rule, these have no cellar, and sometimes they rest upon posts. In the mountains, one sees two-storied stone houses in which the cattle are sheltered on the lower floor. The granaries near these houses seem strange, too, for they are made of woven wickerwork roofed with straw. It is almost a disappointment to find modern houses in some of the villages.

The interiors of these houses are simple and resemble the houses of Serbia except for the stoves. You will not find stoves like these in any other part of the world. They are so arranged that the smoke rises through a pipe in the center, and then descends through a hollow pillar on each side of the stove to the fireplace, from which it goes through the chimney. Why is this a good arrangement for keeping warm in the winter?

In Bulgaria, as in Serbia, there are still a few of the old-time "zadrugas" or community households. Life there might seem to you like a continual party, for brothers and sisters and their families live together. Sometimes five different generations are found on one farm. These zadrugas are rapidly disappearing and each family is coming to own land independently.

The Bulgarians are noted for their long life. What do you think is the reason for this? It may be due to their constant use of sour sheep's milk, to their use of many vegetables, or to the coarseness of their other food. The

peasants are satisfied with coarse black bread, green peppers or cucumbers, a piece of sheep's milk cheese, and a few onions or garlic. If you were to take a meal in a Bulgarian peasant's home, you would have pilav, a mixture of seasoned rice and chopped meat, set before you. If you did not like this Balkan dish, you might eat beans or thick corn soup, similar to our cornmeal mush.

One can easily tell a Bulgarian by the costume. The women wear white bodices with embroidered yokes. Their blue or green skirts are very short, and their white petticoats, with rows of pretty embroidery, show below. In the Danube region, the women wear two carpet-like aprons, one in front and one in back. The clasp of the girdle is always the most important part of the costume. Many of these clasps are handmade and cherished heirlooms in the family; they are generally made of metal, beadwork, or silver filigree. Their jackets are especially gay in rich embroidery, and their glittering, jingling ornaments and chains of gold are often of great value.

The men are not to be outdone by the women. They wear dark-colored full trousers arranged in many folds at the belt. Their jackets are of the same material. In the western part of Bulgaria the men wear tight white woolen trousers trimmed with gay cord. These cords are used so very much in Bulgaria that their manufacture has become an especially important industry, and Bulgarian cord is sold all over the Balkan states and even as far as Asia Minor.

Around his waist the Bulgarian peasant wraps a dark red woolen shawl, several yards in length. In its folds he usually carries all his small possessions, much as your fathers store things away in their many pockets. His costume would be incomplete without the black shaggy sheepskin cap, for it is the national headdress. He wears the same kind of oxhide sandals that the Serbs wear.

If one were to enter a Bulgarian village on a mild fall evening, one would see the peasant girls assembling in an open space. They have flowers fastened in their hair and also tucked in their bodices. They all gather around a great bonfire, seat themselves on the benches, and begin to spin and sing. As soon as their last note has died away, the youth of the village, dressed in their Sunday

FIG. 180. Bulgaria. A village seen at a distance. In the foreground are granaries made of willows. In the background is a fertile plain and in the distance the mountains.

best, come running up. Then they all sing a jesting game of love, with questions and answers, now by a girl, then by a boy. The spindles turn faster and faster, for each girl wishes to convince the young men of her skill. Finally the reed pipe calls them to the dance. Soon the circle of dancers is weaving itself around the fire. The fire dies down and the young people go home.

When Bulgaria became independent of Turkey, about forty-five years ago, most of the people were illiterate.

Now there are few who cannot read and write. Bulgaria has a large university at Sofia, the capital. There are normal schools for the training of men and women who wish to become teachers. There are also public schools for boys and girls, and as a consequence a larger percentage

Fig. 181. Bulgaria. The threshing is being done with threshing sledges. These have pieces of flint or steel on the under side. As the sledges are drawn over the grain, it is cut into pieces and later it is winnowed. The women in the foreground are spinning. Notice the mountains in the background.

of the people can read and write than in any other country in the Balkans.

We have said that Bulgaria is a nation of small farms. About five-sevenths of all the Bulgarians make their living in agriculture. Traveling through the country, one sees acres and acres of corn, which is the chief food of the people. One passes great fields of wheat, which is one of the chief exports. In the damp lands of the south one passes many rice fields. Do you imagine you would see

the same farming methods there that you see in this country? In many places the method of farming is very primitive and so doubly interesting. You see water buffaloes and oxen dragging the clumsy wooden plows through the field. In the southern part even the camel is seen plowing.

The peasants thresh the grain by means of a threshing sledge. This four-cornered board is slightly smaller at one end. The under side is set with many small, sharp slivers of flint. The straw is cut into bits as the oxen slowly drag the sledge over it. As the grain is raised on the winnowing shovel, the chaff is carried away by the wind, and the grain falls to the ground.

The Bulgarians seem to be natural gardeners. They raise cucumbers, beans, onions, garlic, pumpkins, and melons. Tobacco, cotton, and vine growing are important, especially in the eastern part of Bulgaria. These excellent farmers are in great demand all over Europe and each year some 10,000 migrate from the region of Tirnova.

In many parts of Bulgaria great vineyards are purple with their fruit. During the vintage festival the hard-working Bulgars give themselves up to fun. Each morning during the vintage season one can see the village people marching out into the vineyards. Two or three drummers take the lead and pipers and bagpipers follow, making enough noise to split one's ears. A single dancer follows them, making all sorts of grotesque movements. Then comes a wagon drawn by oxen or water buffaloes and carrying all the tools. Both wagon and beasts are trimmed with garlands. These are followed by three or four more dancing women and finally the grape gatherers themselves —men, women and children—all with gay flowers in their hair.

Bulgaria is famous all over the world for its attar of roses. South of the central portion of the Balkan Mountains and between them and low parallel ranges to the

south, are the "valleys of the roses." Here in a valley only eighty miles long and thirty miles wide are 18,000 acres of roses. The inhabitants of one hundred fifty villages live by cultivating these flowers. Toward the end of May and June the scene is truly bewitching. The rose-colored fields gleam as far as one can see. Even the birds that live in them are rose-colored, for the rose starlings fly in great flocks about the fields. Everywhere one can see girls and women busily picking the blossoms, pulling off their petals, and filling the great baskets. An intoxicating fragrance fills the air. As the baskets are filled, the men load them onto their oxcarts and take them home, where the distillation is carried on in a very primitive way, and much of the rose water lost during the process. The three things produced are rose water, attar of roses, and rose wax. The rose water is secured in large quantities and is little prized. After the rose water has stood a long time an oily scum is formed on the surface. This is taken off, put into special flasks, and is the precious attar of roses. To secure one gram of attar of roses, 8000 grams of rose water are necessary.

The sticky juice which clings to the hands while picking the roses is carefully scraped off with small knives and kneaded into little balls. This is the most valuable part of all, the rose wax. The Turks are particularly fond of it. The wealthy put little balls of this wax into their pipes, and while they are smoking the room is filled with the fragrance of roses.

Attar of roses is very valuable. According to the oriental custom, the method of buying must be suited to the high value of the goods. The stranger is first led into the rose garden and there taken through the distillery. After a great many inquiries as to his health and that of his family, the carefully guarded little cupboard containing the flasks is opened. One of them is taken out, while at the same

time the housewife appears in her best Sunday clothes. She sets a little cup of Mocha coffee and a plate of candied fruits before the guest. To refuse them would be a great insult. Then begins a long bargaining which is finally settled in the presence of a witness. And all the time coffee and cigarettes are offered and must be accepted.

Many families make their living by raising roses. Many others, in fact 50,000 families, make their livelihood in the silkworm industry. Here the mulberry tree flourishes and furnishes abundant food for the silkworms. Other families make their living raising poultry. Eggs from the Bulgarian farms are sent out in large quantities by way of the Danube River and Black Sea ports, as well as by rail.

In addition to its rich agricultural resources Bulgaria has forests covering one-third of its area. One-third of all the forests is owned either by the state or by the community and is a source of revenue. The remainder is private property. Attempts are now being made to establish nurseries for raising young trees to reforest the cut-over area.

Bulgaria has many minerals, but most of the mines are undeveloped because of the lack of capital. Manufacturing is being developed and if peace continues progress will be rapid.

Sofia, the present capital of Bulgaria, dates from the pre-Roman days. Then it was an important town. During the Turkish rule it was entirely Turkish. Now it is a busy modern city resembling those of western Europe.

By looking at your map, you will find that Sofia is on the Berlin-to-Bagdad railway. It therefore occupies an important position on the land route between Europe and Asia. From the Berlin-to-Bagdad railway, a main line runs through the northern part of Bulgaria to Varna on the Black Sea. A second main line runs through southern Bulgaria to Burgas, their other Black Sea port.

Chapter XIII

ALBANIA

The Albanians call themselves "Sons of the Mountain Eagle." Certainly no eagle ever had a more barren crag for home than many of the northern Albanians have had. Northern Albania is a wild mountain region where bridle paths are almost the only roads. When tribes of people were migrating east and west, as well as north and south, these primitive people hid in the rugged mountains of Albania. One family built its protecting home on one hillside; another family located on another slope. Each family grew into a tribe, often separated from other tribes by rough mountains. Separated from each other, as they were, by the ruggedness of their country, these tribes were also beyond the pale of any central or local government. These mountaineers did not buy or sell land; neither did they lease it. Their wealth was measured in their sheep and goats, and not in the land they owned. They drove their flocks from valley to valley, and many were the feuds between tribes over the grazing rights.

These mountaineers have always lived an independent life. Not only have they settled their own quarrels; their isolation has also made them supply their own simple wants. Their flocks furnish material for their clothing and also articles of food. In the fertile valleys the hard-working women raise a few crops while the men are away tending their flocks or fighting their old enemies, the Turks, or their Slav neighbors. Almost the only staples which the mountaineers cannot supply for themselves are

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FIG. 182. Albania. The wood market in Durazzo. What kind of wood is being sold for fuel? The burro is a valuable pack animal on mountain trails. The cart is used on roads. Notice the cart wheel.

salt and tobacco. These they buy with the gold which they receive from the sale of their surplus wool and hides.

As one travels through the mountain regions, one is reminded of the life the people have lived for centuries.

Courtesy Junior Red Cross News

FIG. 183. Albania. Market day. Most of the articles, which range from funnels to lamps, have been made out of old oil cans and other tin cans. Notice the typical fez of the Albanians. The trees in the background have had their branches trimmed off for use as firewood.

Even their dwellings seem made for defense. Some are collections of stone buildings which look more like forts than homes. Others seem to be nothing but stone towers. Approaching one of the larger dwellings, one notices that the rear has no windows and that the courtyard is entirely surrounded by a high stone wall. One enters the court through an arched gateway above which is a room for a watchman. Entering the living room, one sees hooks all

around the walls where weapons formerly hung. Everywhere one is reminded of the warlike life of former times.

Part of Albania is a beautiful, wild mountain region with narrow fertile valleys. Between the mountains and the sea lies a barren coastal plain. You wonder why this is not a productive region. All of Albania is a region of heavy rainfall. In the autumn and winter, heavy rains in the mountains turn the mountain streams into torrents. By October, floods spread out from the river valleys over the coastal plain. Much of the area is turned into marshes. The stagnant water breeds mosquitoes that spread fever and malaria. Few people care to live there even if they could survive. In summer, the coastal plain is turned into dry dust. The two-wheeled carts, with wheels more than two yards in diameter, sink to their axles in dust. The deep furrows offer even greater difficulties to traffic than the marshes. If dams were built across the rivers, the plain would not be flooded in the rainy season and there would be water for irrigation in the summer. This coastal region would then become a rich farming land and would supply the food products which it is now necessary to import from other countries.

Back of the coastal plain one sees vineyards and fields of tobacco and corn. There are noble chestnut trees, but the forests of Albania have had many enemies and very few friends. Both men and animals have destroyed them. Shepherds have sometimes burned down trees so that grass for their flocks could grow there the next summer. They have also felled trees so that the animals could feed on the green twigs. In spite of the lack of care, Albania still has beautiful forested areas. There are forests of oak, beech, ash, elm, poplar, and walnut, and higher in the mountains one finds fir and pine.

Southern Albania is not so mountainous as northern Albania. The river valleys are wider and flatter. Agri-

culture is carried on to a greater extent, although the methods are primitive. The wooden plowshare still follows the slow oxen. Rye, oats, barley, tobacco, and corn are raised in large quantities. Olives, oranges, lemons, grapes, and mulberry trees remind us that southern Albania is in the same latitude as southern Italy. In the south the population is denser; the people have had more dealings with each other and they are more advanced in civilization.

Albania today is a backward nation in spite of the real worth of the Albanian people. The three important reasons for this backwardness are the system of land ownership, the lack of education, and the lack of roads.

The average peasant does not own his land, but is a mere tenant on the land of one of the few great landholders or the state. How would it aid Albania to have many of the farmers own their own land?

Most of the Albanians cannot read or write. During the rule of the Turks, all instruction in the Albanian language was forbidden. There were very few Turkish schools and few Albanians wished to send their children to those which were established. As a consequence, the large majority of the Albanians have had none of the advantages of an education. Think of what education has done for the Danish farmers and then explain what it could do for the Albanian farmers. How would education be of value in handling the forests, the floods, and the diseases of the coastal plain? The present government is establishing schools and experimental farms. On these farms, experts are demonstrating the use of modern machinery, the value of rotation of crops, and animal breeding. They have also established an agricultural school with a three years' course.

The lack of roads has hindered the development of Albania. The country has not one mile of standard rail-

Courtesy Junior Red Cross News

FIG. 184. Albania. Plows are made from crooked tree limbs. Sometimes they are tipped with metal. Usually the plow is drawn by a lumbering bullock or ox. Modern machinery is now being introduced.

road. If all her wagon roads, poor though most of them are, were laid end to end, they would only be long enough to extend from her northern to her southern boundary one and one-fourth times. Even the large cities are not united with each other by roads. If there were four times as many roads as there are now, only the large cities and towns would be joined. In order to travel from one city to another, it is necessary to go to the nearest port, then travel by sea to the port nearest the destination. On the whole, Albania is a land of mountain trails and bridle paths. As long as that is the condition, the country will not prosper commercially. Today, one port exports skins to Italy, and another port buys skins in the same country. Why does the second port not buy from the first one? Valona exports olive oil, while Scutari buys it in Italy. One province buys cereals in Italy though the neighboring province has a surplus. Why does that happen? Why do not the people in a fertile region care to produce more than they themselves need? At present Albania is importing more than she is exporting, and most of her imports are foods. She pays for those foodstuffs with her hoarded gold. The government is undertaking to improve the roads by requiring six days of road work each year from each manual laborer and by taxing the others. Even that will not solve their road problem.

The minerals of Albania are almost untouched and largely unknown. There are deposits of iron, coal, and asphaltum and probably lead and copper. Silver was mined there during Venetian days and gold mines were worked even in ancient times. How will education help the Albanians to develop their mineral resources? Where and how can they secure the money to develop their mines?

As yet Albania has very few industries. There are a few flour mills whose output does not supply the home needs. There are a few olive-oil factories. What raw

Courtesy Junior Red Cross News

FIG. 185. Albania. Albanian "freight trains" are slow even when empty. Carts like this one are in use throughout Albania. Notice how the heavy yokes are held on the necks of the water buffaloes.

products can Albania furnish in order to establish other industries?

Albania is one of the smallest states in Europe but is about the same size as Belgium and almost as large as the Netherlands. For the first time in her history she is an independent nation. Will the brave "Sons of the Mountain Eagle" be able to lead their nation to a place among the small but happy and prosperous nations of the world?

made king
1928
hmed Bey Zogu - king title of
Scanderberg III - was president
from January 1925 ; title changed
to monarchy,
King Zog married to the Countess Geraldi
Hungary April 27, 1938
Son born April 6, 1939
Deposed April 1939

Chapter XIV

GREECE

Like the other Balkan countries, Greece is a land of many mountains and of rugged beauty. The plains are small and most of them lie hidden among the mountains. It is on these small plains among the rough hills that one meets everywhere in Greece the fascinating shepherds and goatherds.

In the winter, one sees the sheep and goats feeding on the lower coastal plains, which are green from the winter rains. One sees a shepherd in his full white skirt, called fustanella, leaning dreamily on his long, carved staff. The soft tinkling bells of the sheep tell him that his flock is quietly grazing near by. The occasional bark of the sheep-dog assures him that the sheep are not being permitted to wander away. Sometimes one sees a shepherdess. While her flock is quietly feeding, her hands are busy spinning from a distaff, as the women spun in the same hills thousands of years ago.

When spring comes all is changed, for then the rain ceases and the lower plains become dry and brown. Then the faithful shepherds must drive their flocks to the high mountain pastures where the summer rains furnish pasturage. Then comes "moving day" for the shepherds. They pack their bedding and food on the backs of their donkeys. The children ride in side baskets attached to other donkeys, and the men and women mount still others of those necessary and useful beasts. Then they start out for their summer home, which to them seems their only real home.

Each family selects, if possible, a shady place on the edge of a small valley and builds its rude hut of twigs or stone.

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FIG. 180. Greece. Shepherds in native dress and their flocks on the Argive Plain. This picture is typical of much of Greece. Do you see any forests or farms on the mountain sides? Do you think that Greece is a rich country?

There they spend the summer, surrounded by their many shepherd friends. There they live a simple life, with

coarse brown bread, sheep's milk cheese, and garlic as their usual diet. In the early morning the plaintive pipe of the shepherd breaks the stillness. In midday, when the sun is very hot, both people and sheep take a long nap. Later in the day the women are very busy. They go up

Fig. 187. Greece. In summer these poor shepherds drive their sheep to the meadows in the mountain valleys. Why? There these shepherds live a simple life, in huts often built of fir twigs as seen in the picture. In winter the sheep are brought down to the meadows along the coast. Why?

the hillsides and gather the scanty wood for their fires. They pull up hay and tie it in bundles for future use, and they make cheese from goat's and sheep's milk. If you were traveling there you might meet a youth on the mountain path. Across his shoulder he would have a stout stick, and hanging from each end there would be a cloth

bag. Inside you would find the popular sour goat's-milk cheese. It is to be sold in the village and from there may even be sent to the large cities, for it is a common food among all the Greeks. Late into the evening the contented sheep continue their quiet grazing. The air is chilly and fires are lighted in front of the rude huts. Around each fire gathers a picturesque chatting group of people. Possibly they are joined by charcoal burners from the mountains. As they listen to tales of old, the men sit and contentedly smoke their Turkish water pipes, the nargilehs. As fall approaches the people move back to the lower plains, for the mountains are soon covered with snow.

Many of these shepherds and goatherds are Greeks, but many of them are called Vlachs and are related to the Rumanians. For generations, the Vlachs have been tent-makers and traders, and they roamed from place to place in the Balkan area when it was ruled by Turkey. Now they do not roam so much, and many of these Vlachs live like the Serbs, Bulgars, and Greeks and cultivate the soil.

It is sometimes true that there "are more goats than Greeks in Greece." But in spite of the large number of goats, Greece has today almost twice as many sheep as goats.

Most of the Serbs and Bulgars are shepherds and farmers. They like to own land and till their own soil. Few of the Greeks are farmers. There are two important reasons for this difference. The Serbs and Bulgars have large tracts of level land and they have summer rains. The Greeks have little level land and most of their area gets winter rain. Greece is a land of shepherds and gardeners, with but few farmers. Serbia and Bulgaria produce more foodstuffs than they can use; Greece must import foodstuffs.

Greece is the only Balkan country whose products are mostly of the Mediterranean type. The other Balkan

countries produce necessities; Greece produces luxuries. There the grape and the olive flourish, for their long roots enable them to live through the summer drought with little irrigation. There are about ten times as many olive trees as there are people in Greece. Figs, lemons, oranges, walnuts, and almonds are found in all of these Mediterranean lands of mild temperature. Winter rains and summer

FIG. 188. Greece. The sub-tropical vegetation of palms and cacti on the plain of Sparta is interspersed with cultivated areas. What do you see in the background? In what ways does this resemble southern California?

drought remind us of our own Mediterranean climate of southern California.

There is one Mediterranean crop of which Greece produces almost all the world supply. That crop is currants. Would you like to visit the currant region, the region where they raise currants, ship currants, talk currants, and seem to do everything except eat currants? Then go to the southern shores of the Gulf of Corinth and around down the west side of that peninsula and to the neighboring islands. You will notice that a railroad skirts the coast from Corinth around to Kalamata. Do you see why

that railroad is called the currant railroad? As you travel on that railroad, you go between dark olive groves, then out among the open currant vineyards and again back among the olive trees. Do you wonder where the people live who raise all these seedless grapes which we call currants? You see no houses among these vineyards. If you will glance away up to the edge of the hill, you will see, here and there, a cluster of houses. These are the homes of the workers.

The work generally begins in January, for all the vines must be pruned. The ground must be cultivated and prepared to hold as much of the rain as possible. Later the vines must be sprayed to destroy the insects which attack them. Sometimes the leaves are so close together that the laborers must go all over the fields, thinning out the leaves in order to let the sun get at the fruit. Then the busy workers must prop up the heavy bunches with canes, for some of the bunches are as much as ten inches long and very heavy.

About the first of August the harvesting begins. Only careful pickers are allowed in the field, for some of the bunches must be left for further ripening. The pickers are at work early in the morning, but during the middle of the day they lie down and take a long nap, sometimes sleeping several hours. Then they continue work long into the evening. The currants are stacked in great baskets which the men carry to the drying-ground. There the fruit is spread out on wooden trays about three feet square or is laid in rows on the ground. The trays of currants remind us of the thousands of raisin and prune trays seen in California in the late summer. Harvesting is a gay season, for then it is that the ground seems to be giving up its wealth. When the harvest is over the workers dance far into the night.

The droughts and hot sunshine are needed to dry the

crop. Will the growers get all their currants dried before the fall rains begin? Or will early rains come and ruin a part of the fruit? That is always the question until the crop is safely delivered at the warehouses. The currants are carried by railroad, by boat, and on donkeys to the great warehouses at Corinth, Patras, and Kalamata. Small growers may be seen bringing their currant crop from their vineyards higher up the slopes. Every grower has several donkeys, each loaded with two large baskets filled with currants. Down the slope, the donkeys pick their careful way, carrying the valuable crop. At the warehouses the currants are sorted and prepared for shipment all over the world.

Not all the Greek country folk are gardeners; a few are farmers. If you will look at your map you can find the three largest level areas in Greece. One is in Thessaly; another is in Macedonia; and a third is the dry steppe region in Thrace.

When Greece was a smaller state and her boundary ran through Thessaly, Thessaly was called the granary of Greece. But Thessaly did not produce all the cereals that were needed in the southern part. During a short time in winter, snow covers the treeless cold plains of Thessaly. In the summer it is an interesting garden spot. One sees horses, mules, and oxen used to pump water from wells into reservoirs, that the water may be used in irrigating the fields. One is surprised at the primitive farming methods. Much of the plowing is done with crooked sticks as in Albania. Old-fashioned carts with large solid wooden wheels are drawn by horses or oxen over the poor roads. Everywhere one goes, one sees large circular threshing floors made of stone. At harvest time the grain is spread upon these floors. The slow and patient oxen tread out the grain as they have for ages. Most of the land is owned in large estates as in the days of Turkish rule.

The land is taken by the peasants on shares and is poorly cultivated. Each large estate generally has four kinds of land. One part, on the plain, is used for raising barley, wheat, and tobacco. The second part is on the hill slopes and is used for grapevines, olives, oranges, oaks which supply the acorns for the pigs, and chestnut trees which supply chestnuts for the family. There is also a piece of uncut land to furnish firewood. Still higher, the estate owns a tract to serve as pasture land.

Along the edge of the plain, near the springs, one sees little villages. The peasant owners live in these villages and generally cultivate tobacco and the grapevines on the slopes.

The other farming section of Greece is found in Macedonia, in the valley of the Vardar River. Along the shore one sees the Mediterranean fruits. Rice is also raised on the low lands and famous tobacco is shipped from Macedonia. In 1920, only the United States, the Philippines, and Japan produced more tobacco than Greece.

Salonika has been the important port of this rich farming section for more than two thousand years. It was first called Therma because of the hot springs found there. How do you know that therma means heat? Salonika was on the old Roman road to Constantinople. By means of other Roman roads it was joined to the rich lands lying along the Danube. Today Salonika is the terminus of four railroads. The foodstuffs of the rich farm lands of eastern Jugoslavia are carried by way of Beograd (Belgrade) through the valleys of the Morava and Vardar rivers to Salonika. There the foodstuffs are loaded on boats which take them to the foreign markets.

Because of the ruggedness of the land, the Greeks have become shepherds and gardeners. They have also been driven out from their long coast line to the sea to make a living. In ancient times Greek colonies extended from

the shores of the Black Sea to Gibraltar. Today the blue merchant flag of Greece is seen in every harbor of the Mediterranean and far out upon the ocean. Her ships carry the rich Russian, Rumanian, and Bulgarian foodstuffs which her own country cannot produce.

Greece is not rich in natural resources. Through the ages there has been a great waste of forests in Greece as well as in all other forested regions. Today her forests have almost disappeared. The charcoal burners are partly to blame for present waste; the shepherds burn off the young growth in order that grass may grow for the sheep and goats; and those animals destroy the young shoots by their close nibbling.

Greece has little manufacturing except that which is carried on in the homes. Can you find out why large industries have not developed in Greece?

Remember that Greece is covered by a network of mountains which cut the entire country into many basins. These basins are separated from each other by the mountain ridges. The people in the different basins could not meet each other except by crossing the rough mountains, or, in some cases, by traveling around the coast. Do you think that there would be a large amount of travel between one basin and another? No, and for that reason many separate Greek states grew up and flourished in the olden days.

Of all the ancient Greek states, Athens is the most famous. Ancient Athens, like so many other ancient and medieval cities, was built upon a great rocky prominence several miles from the sea. On that rocky hill, called the Acropolis, were first built her fortress and her homes. Later temples were built there, of beautiful marble from Mount Pentelicus. A few miles away lay her port, Piræus. At her feet lay a dry and barren plain. This was of advantage to her, for the dry plain kept the city healthy and it

also drove the Athenians abroad for food. It was necessary for them to go to the sea for fish; to travel to neighboring islands, which had heavier rainfall, for their fruits and vegetables; to go to Egypt and to Asia Minor for their cereals. After each trip they returned with something besides foodstuffs; they returned with ideas which helped them to develop their own state.

As Athens grew, it outgrew the Acropolis. Halfway down the slope the people built beautiful marble temples and theaters. Finally the city and its walls were extended to the foot of the hill. Today the Acropolis is crowned with ruins of matchless beauty, among which the visitor dreams of the days and deeds of long ago.

Modern Athens is called "the Paris of the East." It might almost be called a city of white marble, for many of the buildings, sidewalks, and pavements are built of marble. Near the city of Athens there is a famous hill, all of marble. This marble has been used as building material since the days of early Athens.

Modern Rome was built on the site of ancient Rome and buried much of ancient Rome. Most of modern Athens is built on another side of the Acropolis from ancient Athens. Why are all the students who wish to study ancient Athens very glad of that?

If you were to stroll around Athens you would soon learn that modern Greece has not forgotten its ancient glory. You find streets with unfamiliar, yet familiar names. There are Apollo, Jupiter, Venus, Theseus, Pan, Solon, and Aristotle streets. The principal shopping street is called Hermes, for was not Hermes their god of trade? They have named another important business street Mercury, the Latin Hermes, and we are reminded that Rome conquered Athens. A large hotel is called Minerva, the Latin name for the goddess Athena. Shops are named after the great men of the past, and even the paper money

is stamped with the head of Demosthenes. Do you ask why they honor the men of old rather than the men of today? For centuries Athens has been under foreign rule. About a hundred years ago, when she was only a collection of ancient ruins and hovels, she gained her independence. Since then modern Athens, the capital of a needy country, has been slowly rising.

Athens has two distinct parts. The new section has wide streets and beautiful buildings. Among these are the University, the National Library, the Academy of Science, the Stadium, and many others. All of those buildings are the gifts of Greeks who have gone to other lands and have become wealthy. They have returned to their home land and have given to their beloved city these beautiful buildings in the ancient style of architecture. The donor of the stadium had the new marble stadium built on the foundation of the ancient one.

The other, smaller, section of Athens, is the old quarter with crooked, narrow streets, and with odors none too fragrant. As you walk through this section you say to yourself, "Am I really in Greece or am I in Turkey?" You certainly see many signs of Turkish life. You walk down "the lane of the red shoes" past booth after booth in which the merchants are selling red leather shoes with turned-up toes and large pompons. Often, too, you see the shoemakers busily at work fashioning the native shoe. There are pouches, embroidered bags, and peasant coats trimmed with dull gold lace. Do you wish to buy a souvenir? Then you will need a pad of paper and a pencil for bargaining, for the merchant does not expect you to pay the price he first asks.

Still more attractive in the evening is the street of the coppersmiths. The forge fires are bright spots in the evening darkness. Beside them sit the smiths. Possibly you may find them mending the pretty brass coffee mills

or the long-handled copper dippers in which Turkish and also Greek coffee is made. Then there is the street of the candles, with shop after shop filled with candles of all sizes and kinds. The Greeks burn candles not only at all their religious services, but at all their festivals.

Fig. 189. Greece. In the region of Mt. Parnassus. In ancient times this mountain was considered the home of the Muses. The forests which once covered this area were destroyed long ago and today the vegetation is very scant.

One narrow street leads into another. Each of the many bright-colored bazaars tells us of Turkish influence, the result of four centuries of Turkish rule. There are bead bazaars with the amber beads so popular in Greece. There are booths in which are sold the bright hemp bags which serve as baskets for marketing. Oriental carpets and rugs are displayed in other booths, and you lingeringly

leave one booth only to find that the next is just as attractive.

In this sunny clime, much of the life of the people is on the streets, as it is in Seville and Naples. The variety of peddlers seems endless. The water carriers carry spring water in graceful, slender jars. Here there are no bubbling fountains such as are found throughout all Rome. The nut peddler offers you walnuts, almonds, and pistachios. He asks, "Will you have them roasted?" You see two large baskets approaching you, one filled with fruit and the other with vegetables. You look closer and see legs moving underneath. Yes, it is the faithful donkey carrying the peddler's fresh stock. Other peddlers call out, "Hymettos honey," the same kind of honey that was sold in Athens when Paul, the apostle, was there. Peddlers everywhere! Fish, egg, flower, and even dry-goods peddlers. You notice the shoeblacks everywhere also. Many of them are dirty little urchins, but honest and alert. During the rainless season Athens is a very dusty city, and it requires a large number of little shoeblacks to keep the shoes shining. They will also sell you a newspaper or deliver packages or messages for you.

If you are keeping house you will be interested in the milkman. You may be certain that he is giving you fresh milk, for he will milk the goat, or possibly cow, at your door while you wait. You can be sure of fresh fowl, too, for look, there comes a drove of turkeys guided by the long pole of their owner. Droves of geese also travel through the streets.

Bakeries and barber shops seem to vie with each other in taking first place. There is a cookshop on wheels. It moves down the street and the housewives come out and do their cooking on it before it moves along. There are other cookshops, too, which are very much like our delicatessen stores. At meal time you see many Greeks

coming from these cookshops, carrying good things to eat. These shops are very popular in Athens, as in Naples, for fuel is scarce and there are few fires for cooking. In all the smaller homes, fire is unknown for heating the house. If one is cold, one goes out of doors and sits in the sun.

Athens, like many other cities of Europe, has many coffee-houses. Here the Greeks sit for hours sipping the thick Turkish coffee, smoking and talking politics, or possibly talking about the currant crop. There are open-air cafés on roofs, in gardens, and along the streets. Hundreds dine in these cafés each evening.

One misses the shade trees, for there are few in Athens. Several of the residence streets are lined with pepper trees, but otherwise the marble and stucco buildings reflect the glare of the bright sun. Grass, too, is rarely seen except on the lawn of the former king's palace. There are gardens with roses, violets, carnations, iris, and brilliant flowering vines. If one wishes, one may visit the royal gardens, which are very beautiful. In the absence of lawns, in the abundance of brilliant flowers, and in the palms and pepper trees, we are reminded that the region around Athens is a true Mediterranean region.

Athens and Piræus are very modern in appearance. Other coast towns, too, have taken on much that is modern. Most of the inland towns of Greece are only market places.

Each one of these inland towns has a square which is lined with cafés. In these the people sit and chat. For hours, the Greek can sit in a café drinking a little cup of Turkish coffee and smoking one cigarette after another. Other Greeks sit and drink sparingly of the native wine which is mixed with resin. Sometimes Turkish sweetmeats are served. In the side streets of the villages, trading is carried on. As one glances into the courtyards one sees

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FIG. 190. Greece. A view of part of Athens taken from the Acropolis. The former royal palace is seen at the right. The hill seen in the picture, like the Acropolis, is a remnant of hard rock. Another hill furnished all the marble for the buildings on the Acropolis.

the large family ovens which are common throughout Greece. Near the oven is a pile of dried twigs which have been brought down from the mountains on the backs of the donkeys. If one happens to be in one of these villages at Easter time, one may see the people roasting a whole lamb on a spit by the roadside. The streets of the small towns are crowded with people of the lower class. There they bargain and trade, for each one wishes to get the better of the bargain. In the towns of the upland regions the streets are filled with donkeys, mules, and sturdy little ponies which have carried their owners in from the country.

In your stories of Greece have you read of the famous oracle of Delphi? It is situated on the slopes of the sacred mountain of Parnassus. If you will look at your map, you will find Mt. Parnassus north of the Gulf of Corinth. It is supposed that in ancient times there was a cavern at Delphi from which vapors escaped. A priestess sat beside this cavern. As she inhaled the vapors, she was supposed to be able to predict events of the future. The heathen priests interpreted her sayings. For years, even hundreds of years, the ancient Greeks believed all that this oracle said. Men came from far and near to consult the oracle. Rarely was an important undertaking begun without first making a visit to Delphi. The oracle was very wise, for the story says that one day when she was asked who would win in battle, she replied, "The best man will win." Both went away assured and happy. If the oracle were speaking truth today and were asked "Will Greece become great again?" what do you think the oracle would say?

Chapter XV

CONSTANTINOPLE

At the southeastern tip of Europe stands a strange and interesting city. By day, many of its parts look very shabby and dirty, but in the twilight it seems to be a city from fairyland. This city is Constantinople.

Constantinople is situated where Europe and Asia meet. If you will look at the map of Constantinople, you will see that part of it is in Europe and part is in Asia. It seems as if it could not decide in which continent it should remain. Stamboul and Pera are on the European side, separated from each other by the Golden Horn. They contain four-fifths of the population of Constantinople. Scutari is on the Asiatic shore.

Stamboul is the real Turkish city. Here you will find the streets crooked, narrow, often dirty, and many unpaved. The wooden buildings become like tinder under the drying winds of the hot summer. Even a small fire soon spreads, as Stamboul has no water system. A fire leaves nothing but the bare ground. One-fourth of Stamboul has been burned over in the last ten or twelve years and has not been rebuilt. Smaller areas in Pera and Scutari have also been burned.

Constantinople is called the "City of a Hundred Mosques." The rounded domes and soaring minarets are a wonderful sight, never to be forgotten. On the street one hears the droning chant of the muezzins from the tall minarets. "Come all ye faithful, there is but one God and Mahomet is his prophet" falls on the ears of all the

faithful followers. From all the side streets men, and sometimes a few women, tread slowly toward the nearest mosque. They stop in the courtyard to cleanse themselves, for no good Mohammedan would enter a mosque without washing. Quietly entering, they place their shoes

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Fig. 191. Turkey. Making furniture in Constantinople. This man is using a bow drill to bore holes. This kind of tool is known to have been used for nearly 2000 years.

in wooden racks on the floor. They kneel on the beautifully colored prayer rugs, each of which has a story woven into its pattern. Can you picture the kneeling Turks in their turbans and long robes? All are facing toward Mecca and are absorbed in deep prayer. At each signal from the priest, their heads rise and then fall until their foreheads touch the floor, reminding one of a waving field of

grain. Five times daily the pious drop their work and go to prayer and to chant from the Koran.

Would you like to see the most beautiful mosque in all the world? It is here in Stamboul and is called St. Sophia. Soon after Constantine founded the city of Constantinople, Justinian built St. Sophia for a Christian church. It was dedicated in 538 on Christmas day. For nine centuries, the Christians used it for their services. When Mohammed II captured the city, many Christians were massacred in this sacred building. Mohammed himself rode up the

main aisle, and jumping on the altar said, "There is no God but one God, and Mahomet is his prophet." Since that time the church has been a Mohammedan mosque. Above it is the crescent of Mahomet instead of the cross. The Turks built a slender minaret on each of the four corners, but the beautiful dome was made when the church was first built.

The interior of the church is even more beautiful than the exterior. A forest of beautiful massive columns greets one. The walls are decorated with marbles of different hues and varied patterns. Rare mosaic work fills the space between the designs. All these decorations bespeak the skillful workmanship of these early Christians. When the Turks took St. Sophia they destroyed some of the mosaics. Other parts were covered with matting before the walls were plastered. In recent years many of these interesting mosaics have been uncovered. In all its beauty, St. Sophia was once to eastern Europe what St. Peter's is to western Europe.

Shopping in Stamboul is an experience one would not wish to miss. Here is located the largest Turkish bazaar, and the East and West jostle each other at every turn. The listless Turks squat on their rugs and each sells his own particular wares. All sorts of interesting articles are displayed. There are beautiful oriental rugs which have traveled over the caravan routes and railroads from western Asia. There are fragrant spices all the way from the East Indies. There are costly perfumes and precious stones. There are beads of every color and every size. There are warm furs, silken slippers, and lovely shawls for women, and for men bright red shoes with upturned toes. One needs a native guide to help one bargain in this busy market. As one selects and bargains, the merchant serves a tiny cup of black Turkish coffee, very thick and sickly sweet. It is well not to do too much shopping in one day,

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FIG. 192. Turkey. The mosque of St. Sophia in Constantinople. This building was once a Christian Cathedral. It is one of the most beautiful buildings of the world.

for each merchant serves this intoxicating coffee to his customers.

It is not only the turbaned Turks who attract you with their tempting wares. The Armenians, the Jews, the Greeks, the Persians, and many other nationalities are all anxious to make sales. One can even purchase the products of western factories. Before the World War more than 10,000 merchants elbowed one another on the streets of this bazaar.

Outside the bazaar, small stores only a few feet square crowd each other in bewildering confusion. Languid Turks squat in the openings with their little stock of ripe olives, beans, peas, and fresh white Turkish cheese. How can these interesting merchants make a living in these tiny shops?

Leaving Stamboul, one pays the toll and joins the crowd moving over the old wooden Galata Bridge which crosses the Golden Horn. This leads to Galata, the modern business section for the whole city of Constantinople. Here are steamship offices, banks, and many other modern buildings.

Above Galata lies Pera. The magnificent homes of Europeans occupy the hillsides. The embassies where foreigners transact their business, the fashionable modern shops, the comfortable hotels and restaurants all center here. In this foreign section one hardly realizes one is in a Turkish city, while Stamboul and Scutari are truly Turkish and remind one of the Orient.

Scutari as seen from the Bosporus is a picture of painted wooden houses and white minarets. Upon the slopes back of the city are groves of dark cypress trees. In the midst of the trees and extending over three miles of rolling plain is the great Turkish cemetery, the largest and most beautiful of all cemeteries in and around Constantinople. The Turks desire to be buried across the Bosporus in Asia.

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FIG. 193. Turkey. A fruit market in Constantinople. The Turkish vendors squat in the street and call their products to passers-by.

The Bosporus is like the narrowed portion of a gigantic hourglass. Constantinople directs a great and valuable traffic through this important passageway. The wealth of Russian and Rumanian wheat fields slips past to the markets of the world. Other products of southern Russia weigh the freight boats down to the water's edge. The great oil wells of Baku pour out their liquid riches into the great tankers which steam past. The Caucasus Mountains and Asia Minor add their share to this great commerce. Even the furs and the lumber of the cold North find their exit past watchful Constantinople.

Return cargoes of needed manufactured goods thread this narrow channel in payment for goods which went the other way. Constantinople has excellent docks outside the Galata Bridge. The harbor and quay facilities which were constructed by German engineers would do credit to any city. The Golden Horn into which flow the "Sweetwaters of Europe" is itself four miles long. Constantinople trades in the goods that go both ways and merchants in time of peace grow rich from this traffic.

Although the Bosporus is in places less than half a mile wide, no bridge crosses it. Consequently, railway connection between the continents is broken there. Scutari is joined by rail with Bagdad. Across the Bosporus, a main railway route connects Constantinople with Sofia, Beograd (Belgrade), Budapest, Vienna, and the ports of Northern Europe. Constantinople also lies in the path of the Berlin-to-Bagdad railroad. At the Bosporus, the ancient Persians levied their tribute of gold from merchants crossing the strait and the Athenians collected a one-tenth tax from all ships that passed. To this very day, Scutari is called the Golden City.

Constantinople, as the meeting place for East and West, North and South, has for years been known to be one of the important places of the world.

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FIG. 194. Turkey. In the center is the curious "Step Street" in Constantinople. This narrow street of broad steps is dirty and disorderly. Each side of the street is lined with booths of merchants, and buyers pass up and down all day. Notice the different languages used on the sign at the right.

APPENDIX

Population and Area of the European Countries According to the Latest Available Statistics

	Population	*Area sq. miles*
Albania	831,877	14,000
Austria	6,428,336	32,352
Belgium	7,462,455	11,744
Bulgaria	4,909,700	39,841
Czechoslovakia	13,604,807	54,264
Denmark	3,318,000	17,120
England	35,678,530	50,874
Esthonia	1,250,000	18,000
Finland	3,300,507	132,510
France	39,402,800	212,659
Germany	59,858,284	185,889
Greece	4,777,380	41,933
Hungary	7,945,878	35,654
Ireland	4,396,000	32,586
Italy	38,835,184	117,982
Jugoslavia	11,600,000	86,878
Latvia	1,850,622	25,000
Lithuania	4,500,000	33,000
Netherlands	6,977,430	12,582
Norway	2,646,775	124,964
Poland	26,376,103	124,097
Portugal	5,960,056	35,490
Rumania	17,393,149	122,282
Russia	103,000,000	1,900,000
Scotland	4,882,288	30,405
Spain	21,347,335	194,783
Sweden	5,904,489	173,035
Switzerland	3,881,000	15,976
Turkey	1,900,000	10,882
Wales	2,206,712	7,466

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Key. āle, căt, fär, åsk, câre, senåte, ạll; ēve, ȇvent, sĕt, hēr; īce, ĭll, stīr; ōld, ȯbey, ŏn, fôr, bo͞ot, bo͝ok; ūse, ůnite, ŭp, menü, ûrn. ou as in *out;* y as in *yet.*

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Sunday December 7, 1941 the Japan
attack Hawaii. at Pearl Harbor
Monday Dec 8, War declared by U. S.